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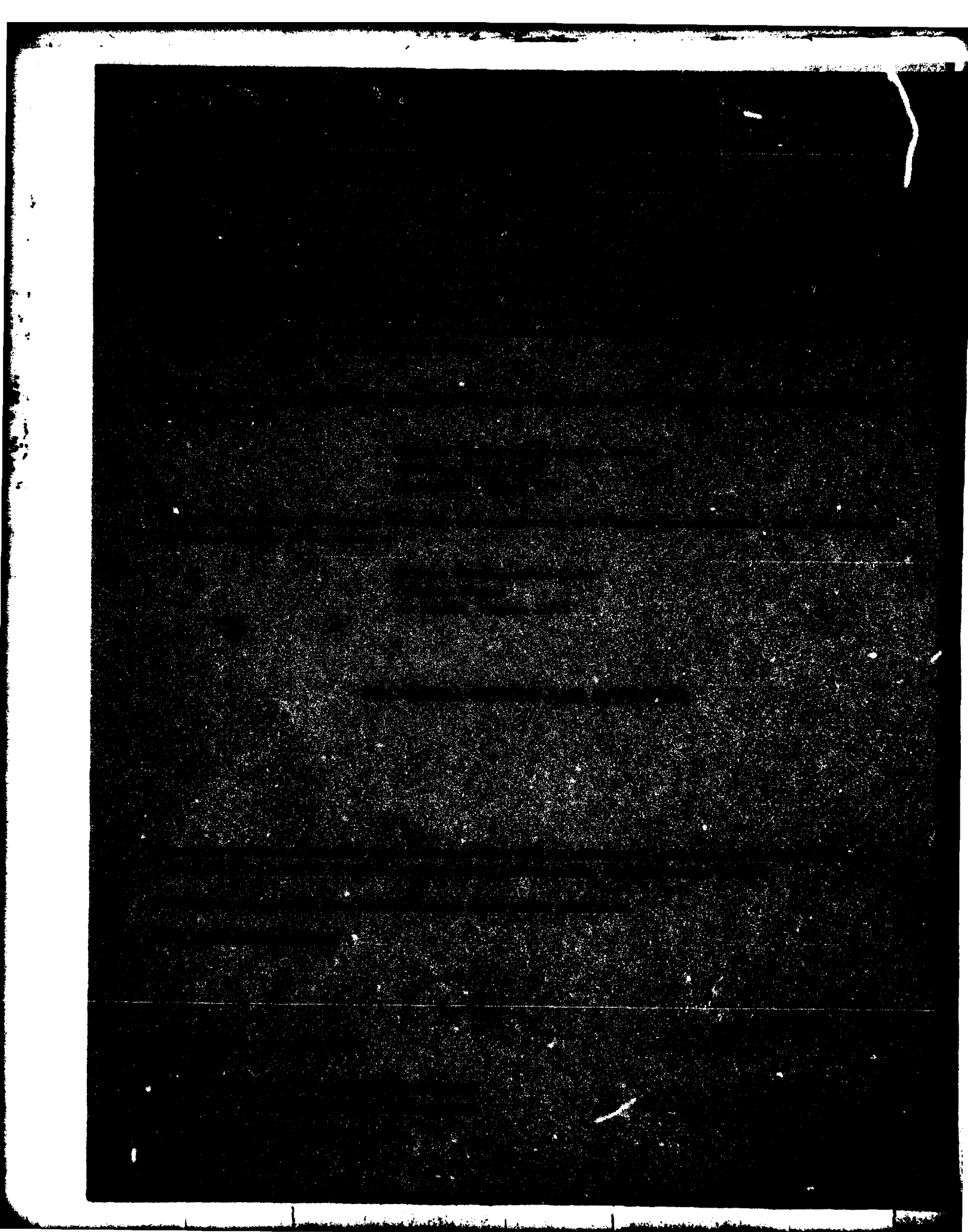
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THE EFFECTS OF THE 1973 OIL PRICE INCREASES
ON THE U.S. ECONOMY
A REPORT FOR THE U.S. CONGRESS
BY THE BUREAU OF ECONOMIC ANALYSIS
U.S. DEPARTMENT OF COMMERCE

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The AF32A-17 noise suppressor is made by Jetway Equipment Corpora- tion for acoustical suppression of the F-106 aircraft. This report provides measured and extrapolated data defining the bioacoustic environments produced by this aircraft operating in this suppressor for five engine power configurations. Near-field data are reported for two locations in a wide variety of physical and psychoacoustic measures: overall and band sound pressure levels, C-weighted and		

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A-weighted sound levels, preferred speech interference level, perceived noise level, and limiting times for total daily exposure of personnel with and without standard Air Force ear protectors. Far-field data measured at 19 locations are normalized to standard meteorological conditions and extrapolated from 75-8000 meters to derive sets of equal-value contours for these same seven acoustic measures as functions of angle and distance from the source. Refer to Volume 1 of this handbook, "USAF Bioenvironmental Noise Data Handbook, Vol 1: Organization, Content and Application", AMRL-TR-75-50(1) 1975, for discussion of the objective and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc.

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PREFACE

This report was prepared by the Biodynamic Environment Branch, Aerospace Medical Research Laboratory, under Project/Task 723107, Technology to Define and Assess Environmental Quality of Noise From Air Force Operations.

The author gratefully acknowledges Mr. John Cole and Mr. Robert Powell for their assistance in preparing this report, Mr. Jerry Speakman and Capt. Richard Gorman for their assistance in acquiring the raw data, Mr. Keith Kettler, Mr. Henry Mohlman and Mr. Fred Lampley of the University of Dayton for assistance in the mechanics of data processing, and Mrs. Peggy Massie for assistance in typing this report.

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INTRODUCTION

The F-106B aircraft equipped with one Pratt and Whitney J75-P-17 engine functions as a pilot proficiency training aircraft while maintaining full tactical capabilities for the interception and destruction of hostile aircraft and missiles. This aircraft is manufactured by General Dynamics/Convair and is code named the Delta Dart. The AF32A-17 noise suppressor is made by Jetway Equipment Corporation to provide noise level reduction for all F-106 aircraft during ground runup operations.

This volume provides measured and extrapolated data defining bioacoustic environments produced by this aircraft in this suppressor system during ground runup operations. Such data are essential to evaluate ear protection requirements, limiting personnel exposure times, voice communication capabilities, and annoyance problems associated with group runups of the F-106 aircraft operating in the AF32A-17 noise suppressor.

This volume is one of a series published by the Aerospace Medical Research Laboratory (AMRL) under the same report number (AMRL-TR-75-50) as a multi-volume handbook that quantifies the noise environments produced at flight/ground crew locations and in surrounding communities by operations of Air Force aircraft and ground support equipment. The far-field, community-type noise data in the handbook describe the noise produced during ground operations of aircraft, ground support equipment, and other ground-based equipment or facilities.

Volume 1 of this handbook discusses the objectives and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc. Volume 2 provides a method and data for adjusting the handbook's far-field noise data, which are for standard meteorological conditions (15°C temperature, 70% rel humidity, 0.760 meters Hg barometric pressure), to derive comparable data for other meteorological conditions. Refer to Volumes 1 and 2 (references 1 and 2) for such information because it is not repeated in other handbook volumes.

A cumulative index lists those aerospace systems contained in the handbook, and identifies the specific volumes containing each type of environmental noise data available (i.e., inflight/flight crew and passenger noise, near-field/ground crew noise, far-field/community noise). Volume numbers are assigned sequentially as individual volumes are published. This index is periodically updated as individual volumes are published and is available upon request from AMRL/BBE, Wright-Patterson AFB, OH 45433. Organizations on the distribution list for the handbook will automatically receive a copy of each updated index.

Direct any questions concerning the technical data in this report and other handbook volumes to: AMRL/BBE, Wright-Patterson AFB, OH 45433; AUTOVON 78-53675 or 78-53664; Commercial (513) 255-3675 or (513) 255-3664.

1. Cole, John N., *USAF Bioenvironmental Noise Data Handbook Volume 1: Organization, Content and Application*, AMRL-TR-75-50 (1), Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975.
2. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 2: Procedure to Evaluate Effects of Non-standard Meteorological Conditions on Far-Field Noise*, AMRL-TR-75-50 (2), AMRL, WPAFB, OH, 1975.

NEAR-FIELD NOISE

MEASUREMENTS

AMRL acquired near-field noise data on the AF32A-17 noise suppressor system during ground runup operations of the F-106 aircraft. For these tests the aircraft was located in the AF32A-17 noise suppressor at Selfridge ANG with no significant reflecting surfaces in the vicinity except the ground plane. Table 1 gives the surface meteorological conditions and the five engine power conditions. The groundcrew chief selected power conditions and near-field locations generally used during routine maintenance or engine runup for preflight checks.

At each near-field location a test engineer randomly moved a hand-held microphone in and around each location, probing all areas where a crew member's head would normally be located. He recorded all the noise samples on magnetic tape. During analysis of each sample, he determined the one-third octave band root-mean-square sound pressure using a 4- or 8-second integration time to derive a power-averaged level for each location. Figure 1 shows the two near-field locations where ground crew are usually located for maintenance and/or preflight checkout operations. Estimates of noise levels at other locations are difficult in the near-field since the noise source is spatially distributed, i.e., not a point source. The noise levels at near-field locations can vary widely depending upon relative distances from each noise source (intake noise, exhaust noise, panel resonances, internal engine noise through the engine wall, etc.).

Table 1 lists the numeric/alphabetic designators used on the data pages in this report to identify the measurement locations and test conditions. For example, the designator 1/A means ground crew location 1 and test condition A.

RESULTS

The measured data presented in Table 2 define the sound pressure levels (SPL) produced by the F-106 aircraft in the AF32A-17 noise suppressor at the two ground crew locations. This table includes the overall, 1/3 octave band, and octave band levels. From these data one can calculate the variety of measures given in Table 3, which are widely used to assess the effects of noise on personnel and their performance.

All near-field data are the meteorological conditions at the time of test but are valid for all typical airbase meteorology because of the short sound propagation distances involved.

TABLE 1

**MEASUREMENT LOCATIONS AND TEST CONDITIONS
FOR NEAR-FIELD NOISE MEASUREMENTS**

**F-106 Aircraft Suppressor Ground Runup
Test #77-778-001**

<i>Ground Crew Location</i>	
1	Marshal Position
2	Trim Check Adjustment Position
<i>Aircraft Engine Operation</i>	
A	Idle Power (59% RPM)
B	85 %
C	95% RPM
D	Military Power (100% RPM)
E	Afterburner Power
<i>Meteorology</i>	
Temperature	4 C
Bar Pressure	.754 M Hg
Rel Humidity	60 %
Wind — Speed	Calm
— Direction	Calm

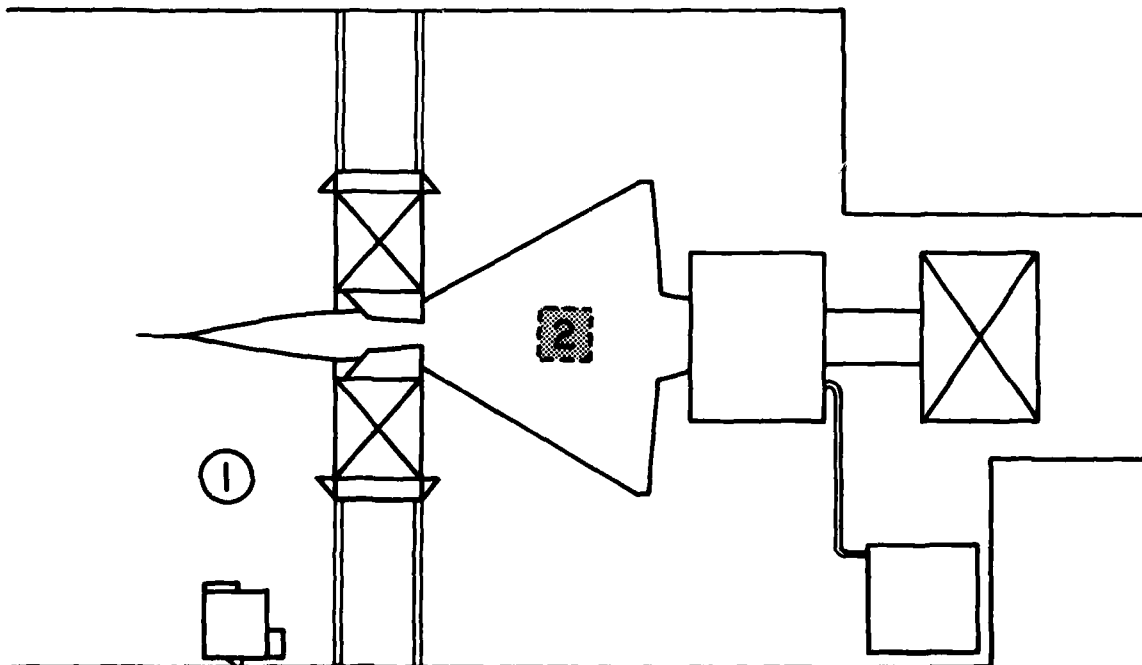


Figure 1. Near-Field Measurement Locations

FAR-FIELD NOISE

MEASUREMENTS

AMRL acquired the near and far-field data during a 1—2-hour test period, thus keeping similar meteorological conditions. Figure 2 shows the aircraft in the suppressor and its orientation relative to 19 microphone measurement sites on a semicircle. The center of the 100 meter radius semicircle used in surveying the AF32A-17 suppressor was on the ground directly below the center of the exhaust stack.

Table 4 provides cockpit readouts of engine characteristics (% RPM, fuel flow, etc.) for each power setting used in the far-field tests. Also listed in this table are the surface meteorological conditions during data acquisition.

All 19 microphone measurement sites are in the acoustic far-field of the source where the sound wave-fronts spherically diverge and the noise source may be regarded as a point source.

A portable microphone/tape-recorder system was used to sequentially record the noise at each far-field location. The microphone was attached to a hand held pole, pointed at the source (0° angle of incidence) and vertically scanned from 0.5 to 3 meters for a period of 5-10 seconds during data acquisition at each microphone location. These samples were then time-integrated to derive a root-mean-square sound pressure level. Vertical scanning and time-integrating together reduce anomalies frequently present in data acquired by a fixed height microphone.

RESULTS

Table 5 lists the overall and 1/3 octave band SPL measured at the far-field locations under meteorological conditions at the time of the test. Data in all other figures and tables are based on these levels. These data were normalized to 100 meters distance and standard meteorological conditions (15 C temperature, 70% relative humidity, 0.760 meter Hg barometric pressure) and used to derive the graphic data in Figure 3 which provides a compact summary of the far-field noise characteristics of the F-106 aircraft operating in the AF32A-17 noise suppressor in a standard format.

Estimates of the noise levels for intermediate power settings (e.g., 90% RPM) and/or different number of engines operating (e.g., single engine) can be determined as explained in Volume 1 of this handbook.

Figures 4 through 10 are sets of equal noise contours describing seven different measures of noise as a function of angle and distance from the source for standard day meteorology. They are respectively, overall sound pressure level, C-weighted sound level, A-weighted sound level, perceived noise level, speech interference level, permissible exposure times for personnel and octave band sound pressure levels.

Data excessively influenced by spurious background/electronic noise were eliminated from all figures and tables.

Test personnel performed noise surveys during quiet periods when the background noise was minimal, e.g., early in the morning when no other aircraft or engine test stands were operating. Data eliminated because they were near the background/electronic noise were generally not significant because the levels were so low.

Volume 2 of the handbook describes the influence of meteorology on far-field noise environments, and provides, if required, the factors necessary to adjust the handbook's standard meteorological day data.

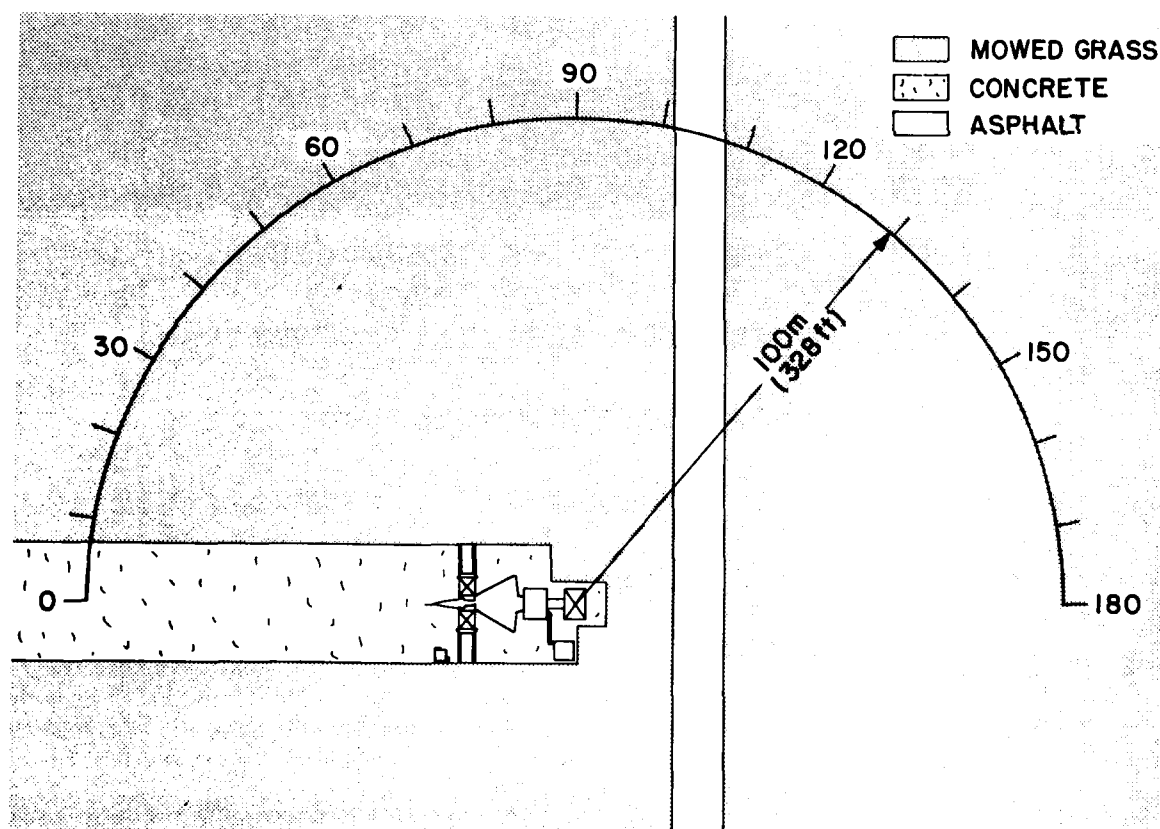


Figure 2. Far-Field Measurement Locations at Selfridge ANG, MI

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:									
2	OCTAVE BAND										
		NOISE SOURCE/SUBJECT: (OPERATION:)									
		F-106 AIRCRAFT IN THE ()									
		AF/324-17 SUPPRESSOR ()									
		GROUND CREW ()									
		NEAR FIELD NOISE LEVELS ()									
		LOCATION/CONDITION									
		1/A	2/A	1/B	2/B	1/C	2/C	1/D	2/D	1/E	2/E
FREQ (Hz)											
31.5		84	93	92	104	99	108	100	109	104	113
63		88	97	94	104	97	109	97	108	99	110
125		86	99	91	105	100	115	99	114	101	116
250		85	98	90	102	98	110	100	112	103	114
500		86	100	96	108	99	114	101	115	102	116
1000		91	106	93	108	99	113	100	115	103	117
2000		89	103	97	111	98	112	98	113	102	116
4000		83	100	93	107	95	111	97	112	99	113
8000		78	98	84	100	87	103	90	103	90	103
OVERALL		96	110	103	116	107	121	108	122	111	124

TABLE: MEASURES OF HUMAN NOISE EXPOSURE										IDENTIFICATION:	
3											
NOISE SOURCE/SUBJECT: (OPERATION:)										OMEGA 3.2	
F-106 AIRCRAFT IN THE ()										TEST 77-778-001	
AF/32H-17 SUPPRESSOR ()										RUN 01	
GROUND CREW ()										14 SEP 78	
NEAR FIELD NOISE LEVELS ()										PAGE H1	
LOCATION/CONDITION											
1/A	2/A	1/B	2/B	1/C	2/C	1/D	2/D	1/E	2/E		
HAZARD/PROTECTION											
C-WEIGHTED OVERALL SOUND LEVEL (OASLC IN DBC) AT EAR											
A-WEIGHTED OVERALL SOUND LEVEL (OASLA IN DBA) AT EAR											
MAXIMUM PERMISSIBLE TIME (T IN MINUTES) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)											
NO PROTECTION											
OASLC	96	110	102	116	107	121	108	122	111	123	
OASLA	94	110	101	115	104	119	105	120	108	122	P
T	85	5	25	2.2	15	P	13	P	8		
MINIMUM QPL EAR MUFFS											
OASLA*	70	84	77	90	82	97	83	97	85	99	
T	960	480	960	170	679	50	571	50	404	36	
AMERICAN OPTICAL 1700 EAR MUFFS											
OASLA*	66	79	72	85	78	92	78	92	81	94	
T	960	960	960	404	960	120	960	120	807	85	
V-51R EAR PLUGS											
OASLA*	68	83	74	88	79	93	80	94	83	96	
T	960	571	960	240	960	101	960	85	571	60	
AMERICAN OPTICAL 1700 EAR MUFFS PLUS V-51R EAR PLUGS											
OASLA*	56	70	60	74	65	79	66	80	69	82	
T	960	960	960	960	960	960	960	960	960	679	
H-133 GROUND COMMUNICATION UNIT											
OASLA*	67	82	73	87	77	91	78	92	81	95	
T	960	679	960	285	960	143	960	120	807	71	
COMMUNICATION											
PREFERRED SPEECH INTERFERENCE LEVEL (PSIL IN DB)											
PSIL	89	103	95	109	99	113	100	114	102	116	
ANNOYANCE											
PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT IN PNDB)											
TONE CORRECTION (C IN DB)											
PNLT	107	123	117	131	118	134	120	135	121	135	
C	1	1	2	2	1	1	1	1	0	1	

* BASED ON CALCULATED SPL SPECTRUM UNDER PROTECTIVE DEVICE.
P ADDITIONAL EAR PROTECTION REQUIRED.

TABLE 4
TEST CONDITIONS
FOR FAR-FIELD NOISE MEASUREMENTS

F-106 Aircraft In The AF32A-17 Noise Suppressor, Ground Runup
Selfridge ANG, MI, Tail # 58-767

Aircraft Engine Operation

Idle, Power	One Engine 59 % RPM 1.2 EPR 1600 LBS/HR, Fuel Flow
-------------	---

85% RPM	One Engine 85 % RPM 1.85 EPR 2400 LBS/HR, FF
---------	---

Military Power	One Engine 100 % RPM 2.18 EPR 10500 LBS/HR, FF
----------------	---

Afterburner Power	One Engine 100 % RPM 2.18 EPR 24500 LBS/HR, FF
-------------------	---

Meteorology

Temperature	4 C
Bar Pressure	.754 M Hg
Rel Humidity	60 %
Wind — Speed	Calm
— Direction	Calm

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:															
5		OMEGA 1.4															
1/3 OCTAVE BAND		TEST 77-778-001															
DISTANCE = 100 METERS		RUN 01															
NOISE SOURCE/SUBJECT:		METEOROLOGY:															
F-106 AIRCRAFT IN THE		TEMP = 4 C															
AF32A-17 SUPPRESSOR		BAR PRESS = .754 M HG															
ENGINE J75-P-17		REL HUMID = 60 %															
FAR FIELD NOISE		PAGE 2															
FREQ (HZ)		ANGLE (DEGREES)															
		30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	62<	63<	64<	67	69	71	70	68	67	66	66	63<	67	63<	66	67	68
31.5	59<	61<	60<	63<	63<	62<	64<	62<	62<	62<	60<	60<	61<	61<	62<	62<	63<
40	63<	63<	64<	63<	62<	61<	63<	61<	62<	60<	60<	60<	61<	60<	60<	60<	60<
50	65<	63<	65<	66<	67<	66<	65<	67<	61<	62<	64<	66<	66<	65<	63<	65<	63<
63	69<	65<	69	73	76	73	71	70	68<	67<	69<	71	70	66<	64<	67<	66<
80	65<	66	68	65<	67	64<	65<	65<	66	66	66	67	66	66	61<	62<	61<
100	63<	62<	65<	62<	65<	64<	64<	64<	64<	63<	64<	64<	63<	62<	61<	59<	61<
125	64<	63<	67	68	69	67	68	67	66	65<	66	65<	66	61<	60<	64<	64<
160	63<	59<	63	63	62	62	63	61<	62	61<	60<	61<	60<	57<	56<	58<	58<
200	62	61	62	62	62	60	62	62	62	61	60	59	58	56<	55<	59<	61
250	61	62	63	65	63	60	60	62	65	62	60	60	57<	55<	55<	57<	56<
315	66	63	66	65	61	62	61	64	66	62	58	57	56	53<	52<	53<	55<
400	61	59	62	61	61	59	60	63	60	60	58	56	53<	50<	47<	49<	53<
500	61	58	62	62	60	60	61	64	61	59	57	55	53<	51<	47<	50<	52<
630	64	58	60	61	64	60	60	62	63	62	61	58	56<	56<	50<	55<	58
800	62	57	60	61	64	60	60	61	62	58	59	57	58	57	52<	55<	54<
1000	66	59	65	66	69	63	60	61	64	61	60	59	62	63	58	60	54<
1250	65	61	65	65	66	61	59	61	62	65	61	64	65	73	65	62	60
1600	61	60	63	62	66	62	63	64	58	65	65	64	69	67	63	61	49
2000	60	58	59	58	61	58	64	60	64	63	64	66	65	65	62	59	46
2500	57	56	54	58	56	58	57	62	53	61	58	60	59	57	53	52	42
3150	60	58	60	54	60	58	59	53	53	64	61	59	59	58	53	54	44
4000	58	57	57	54	60	58	58	63	52	65	61	58	58	57	51	52	42
5000	51	52	51	49	58	55	55	59	48	60	57	52	54	52	51	48	37<
6300	47	47	47	46	56	54	54	57	46	58	56	52	51	47	46	45	39
8000	40	39	39	38	45	47	45	49	39	50	48	44	42	41	38	35	34
10000	33<	33<	32<	40	41	38	39	43	43	42	38	35	35	33<	29<	28<	35
OVERALL	77	75	77	78	80	78	78	76	77	76	77	77	78	76	73	74	74

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:																	
5	1/3 OCTAVE BAND	OMEGA 1.4																	
	DISTANCE = 100 METERS	TEST 77-778-001																	
NOISE SOURCE/SUBJECT:		METEOROLOGY:																	
F-106 AIRCRAFT IN THE		TEMP = 4 C																	
AF32A-17 SUPPRESSOR		BAR PRESS = .754 M HG																	
ENGINE J75-P-17		REL HUMID = 60 %																	
FAR FIELD NOISE		PAGE 2																	
FREQ (HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	78	75	76	79	80	82	82	81	80	77	78	78	77	77	77	78	78	81	81
31.5	73	72	74	75	77	77	77	76	76	74	74	72	74	73	76	75	77	79	78
40	77	77	77	75	75	74	73	73	73	71	70	71	72	72	75	74	76	76	77
50	79	79	79	78	75	70	70	71	71	68	69	68	69	68	73	76	75	77	78
63	77	77	76	73	77	75	75	76	74	72	72	72	72	77	72	74	73	73	74
80	73	72	72	70	69	73	73	74	71	71	72	71	70	70	69	69	71	71	73
100	72	73	71	70	71	71	71	72	69	68	68	69	73	72	70	69	69	72	73
125	76	75	74	74	76	76	74	73	74	73	73	72	72	73	70	72	70	70	71
160	72	70	71	75	71	70	69	67	69	69	68	68	67	67	69	69	65	67	
200	74	72	73	74	73	70	69	68	68	68	68	69	67	67	66	65	65	64	64
250	71	72	72	73	71	68	68	69	68	67	67	67	67	65	64	64	62	63	62
315	72	70	73	74	71	72	71	70	70	70	68	69	69	65	64	62	63	61	60
400	73	69	73	73	71	70	70	71	72	72	69	70	70	67	65	62	62	61	60
500	76	70	75	74	73	71	71	71	73	75	71	72	73	69	67	63	62	60	59
630	71	67	73	73	71	71	71	70	72	73	69	71	75	71	69	64	64	62	59
800	70	68	73	73	73	73	73	73	74	75	70	71	75	73	70	64	65	65	59
1000	70	69	71	71	73	71	71	72	73	73	71	71	77	75	72	65	66	67	62
1250	70	67	70	70	72	70	70	70	70	73	74	71	77	77	73	67	67	67	61
1600	71	68	71	71	73	72	71	70	73	75	77	75	77	79	74	68	69	67	61
2000	74	71	74	71	72	73	72	71	75	75	76	77	76	77	75	69	68	70	62
2500	69	66	70	69	71	72	70	68	74	75	75	75	74	72	70	67	65	65	60
3150	67	66	68	69	73	74	71	69	77	78	75	75	74	71	69	65	62	63	59
4000	68	67	70	68	74	75	72	70	79	78	77	75	74	71	70	68	64	63	58
5000	62	59	63	62	68	67	65	63	72	70	70	68	67	63	63	61	59	57	51
6300	57	54	57	57	64	64	61	58	67	66	67	64	62	60	58	57	54	51	48
8000	51	49	51	50	58	59	56	54	63	60	60	59	56	54	50	51	47	44	40
10000	47	45	46	47	57	58	55	52	60	57	57	54	51	49	46	49	43	40	38
OVERALL	87	86	87	87	87	88	87	86	88	87	87	86	87	87	85	84	85	86	86

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)		IDENTIFICATION:																	
5		OMEGA 1.4																	
1/3 OCTAVE BAND		TEST 77-778-001																	
DISTANCE = 100 METERS		RUN 03																	
NOISE SOURCE/SUBJECT:		METEOROLOGY:																	
F-106 AIRCRAFT IN THE		TEMP = 4 C																	
AF32A-17 SUPPRESSOR		BAR PRESS = .754 M HG																	
ENGINE J75-P-17		REL HUMID = 60 %																	
FAR FIELD NOISE		PAGE 2																	
FREQ (HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
25	83	84	82	84	83	83	86	85	82	83	82	82	82	83	84	85	85	87	84
31.5	78	78	78	82	82	82	82	83	81	81	80	80	80	80	82	79	82	83	83
40	84	82	81	81	81	80	80	80	78	78	76	78	79	78	81	81	83	84	85
50	83	83	82	80	78	77	76	76	75	74	76	72	76	80	81	83	84	85	
63	81	81	81	78	76	78	78	77	75	76	75	75	75	75	74	77	78	82	82
80	79	77	76	76	77	75	78	76	79	78	79	74	78	75	73	74	75	78	81
100	77	77	77	79	78	75	79	73	77	80	77	77	75	76	75	74	75	77	80
125	78	77	79	81	80	79	78	76	77	76	76	74	75	74	75	77	72	73	76
160	79	74	77	81	79	79	79	74	74	74	73	73	72	74	73	75	77	72	77
200	81	77	78	79	78	77	78	76	74	75	74	75	74	74	76	78	78	73	78
250	80	77	79	77	77	76	77	75	75	73	72	73	73	71	73	76	75	72	73
315	79	77	79	78	79	78	78	77	77	76	74	73	73	72	72	71	73	70	71
400	78	76	80	81	76	79	80	80	79	77	75	73	72	70	70	69	70	67	69
500	77	76	77	78	76	77	78	77	77	75	73	72	72	70	69	67	67	65	63
630	77	74	75	75	74	75	76	76	75	74	71	71	70	69	69	67	67	65	63
800	75	73	76	77	76	77	78	79	76	74	70	70	70	70	72	71	71	69	65
1000	74	74	74	77	75	77	78	80	75	73	70	70	71	71	73	73	74	71	67
1250	72	70	69	74	70	71	71	71	69	68	69	68	69	69	72	71	71	67	62
1600	74	72	73	76	75	76	75	77	77	75	73	71	71	70	73	74	76	73	67
2000	70	71	72	75	74	77	74	78	78	75	74	72	71	70	71	73	75	73	67
2500	68	69	70	73	72	73	71	71	71	70	73	72	72	70	70	71	71	71	64
3150	67	67	68	72	72	74	71	70	67	71	70	69	70	70	70	68	70	69	62
4000	67	67	69	73	72	74	73	73	68	70	70	71	72	73	73	70	72	70	64
5000	62	61	63	70	67	68	65	66	67	64	66	65	63	64	66	62	65	61	56
6300	57	55	59	64	62	62	59	60	61	58	60	61	62	61	61	58	60	57	50
8000	52	50	54	57	56	57	56	55	57	54	56	55	56	56	57	52	53	50	44
10000	47	45	49	50	51	52	50	49	53	49	48	49	50	48	49	47	47	44	39
OVERALL	92	91	91	92	91	91	92	91	91	90	89	88	89	89	90	90	91	92	92

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (DB)																				IDENTIFICATION:	
5																				OMEGA 1.4	
DISTANCE = 100 METERS																				TEST 77-778-001	
NOISE SOURCE/SUBJECT:																				RUN 04	
F-106 AIRCRAFT IN THE																				METEOROLOGY:	
AF32A-17 SUPPRESSOR																				TEMP = 4 C	
ENGINE J75-P-17																				BAR PRESS = .754 M HG	
FAR FIELD NOISE																				REL HUMID = 60 %	
																				PAGE 2	
FREQ																				ANGLE (DEGREES)	
(HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180		
25	85	84	85	84	85	84	84	85	82	84	84	83	82	85	85	86	88	89	85		
31.5	79	80	81	81	83	85	84	83	83	82	80	82	81	83	83	82	85	85	86		
40	85	82	82	83	82	82	81	80	81	80	80	80	80	81	82	84	85	86	87		
50	86	84	83	81	77	78	76	77	76	75	74	75	79	78	82	82	84	87	86		
63	84	83	83	81	78	80	78	78	76	78	75	73	77	76	77	78	81	84	84		
80	81	79	77	78	74	78	79	77	77	78	76	77	77	75	77	76	77	82	83		
100	78	76	76	78	77	79	80	77	75	77	76	77	76	77	77	75	77	80	80		
125	79	77	78	79	79	79	78	75	73	73	75	76	76	76	78	79	74	75	76		
160	78	75	77	82	81	78	79	78	74	75	76	77	76	77	74	77	77	76	79		
200	80	78	78	79	79	76	77	77	76	75	75	77	74	76	75	78	80	76	78		
250	80	79	80	78	78	78	79	78	78	75	75	75	73	74	74	77	79	76	76		
315	79	79	82	79	81	81	81	80	80	77	76	76	74	74	75	73	76	76	74		
400	77	78	81	81	79	82	84	82	82	79	76	74	72	72	73	71	73	72	71		
500	76	77	79	79	78	80	81	81	80	77	74	74	73	70	70	68	71	70	70		
630	75	77	76	78	78	79	78	78	77	76	71	71	69	70	71	70	73	70	68		
800	74	75	78	79	76	79	77	78	74	72	72	71	72	73	74	72	77	75	69		
1000	72	75	77	78	77	81	78	78	73	70	73	73	73	74	75	74	80	76	70		
1250	69	70	71	75	74	75	74	74	72	68	73	73	72	73	73	72	74	73	66		
1600	69	72	74	76	75	79	78	80	79	73	73	73	71	72	73	74	77	77	71		
2000	68	72	74	76	77	81	80	84	82	78	76	73	72	73	73	73	77	77	71		
2500	65	69	69	74	73	78	75	76	76	74	77	71	71	73	72	70	71	73	69		
3150	64	68	70	74	73	77	75	75	74	71	76	70	72	74	72	71	70	71	66		
4000	64	68	71	74	74	77	76	77	74	71	74	70	72	76	74	72	73	73	68		
5000	58	62	63	69	70	73	70	70	71	67	72	67	65	67	66	64	65	65	61		
6300	54	56	60	63	64	67	64	66	65	62	67	63	64	64	62	58	61	61	56		
8000	48	51	54	57	59	61	60	60	60	57	62	57	57	58	58	53	55	53	50		
10000	44	46	49	50	52	54	53	54	53	50	55	50	51	51	50	46	47	47	43		
OVERALL	93	92	93	93	92	94	93	93	92	91	90	90	89	91	91	92	94	95	94		
LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.																					

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: MEASURED SOUND PRESSURE LEVEL (D3)																			IDENTIFICATION:	
1/3 OCTAVE BAND																				
5																			OMEGA 1.4	
DISTANCE = 100 METERS																			TEST 77-778-001	
NOISE SOURCE/SUBJECT:																			RUN 05	
(OPERATION:																				
(F-106 AIRCRAFT IN THE																			TEMP = 4 C	
(AF32A-17 SUPPRESSOR																			BAR PRESS = .754 M HG	
(ENGINE J75-P-17																				
(FAR FIELD NOISE																			REL HUMID = 60 %	
																			PAGE 2	
FREQ																			ANGLE (DEGREES)	
(HZ)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
25	92	89	91	92	90	92	90	88	86	87	85	84	86	86	87	87	88	90	91	
31.5	88	86	88	88	90	89	89	87	87	85	86	83	85	85	86	86	87	90	89	
40	87	87	87	88	88	88	84	85	85	85	83	81	83	84	85	87	88	91	88	
50	84	85	85	84	84	83	81	80	81	81	77	78	79	81	83	84	85	90	89	
63	91	89	87	87	86	83	84	79	81	80	79	78	78	80	83	85	88	94	92	
80	86	83	82	80	80	83	81	78	80	79	77	76	77	77	77	78	79	85	83	
100	80	80	80	80	79	83	78	78	78	78	77	76	77	78	78	77	76	83	81	
125	84	81	81	82	83	85	78	75	77	76	79	79	80	82	84	81	78	85	82	
160	84	80	80	81	84	84	81	78	77	78	75	76	79	79	78	78	79	80	78	
200	86	82	84	83	83	84	83	81	80	79	77	77	78	76	75	76	77	82	79	
250	85	82	82	83	82	83	82	79	78	77	77	77	76	77	77	77	78	80	77	
315	82	82	84	82	83	84	84	82	82	81	77	77	78	77	77	77	78	83	81	
400	79	80	83	84	81	85	87	82	84	82	78	77	78	77	76	77	78	82	80	
500	79	79	81	82	83	85	85	81	83	80	75	75	77	75	74	75	77	79	76	
630	79	78	79	80	81	82	82	78	78	78	72	72	74	73	72	74	77	78	74	
800	77	77	80	81	79	80	80	77	76	74	71	71	73	72	72	75	77	79	72	
1000	75	75	77	79	79	79	80	75	75	72	71	71	72	72	72	74	77	79	71	
1250	74	74	75	78	79	78	78	73	73	70	71	71	70	71	72	74	77	77	70	
1600	73	74	75	78	78	78	78	72	74	73	74	73	71	71	72	74	76	77	70	
2000	72	73	75	77	79	79	79	72	80	78	77	75	72	72	72	73	74	78	69	
2500	70	72	73	77	78	78	78	71	78	75	78	75	73	73	73	73	74	77	68	
3150	70	72	73	77	78	78	75	69	73	71	74	71	72	73	74	74	75	76	69	
4000	69	72	73	77	80	78	74	70	74	72	71	71	73	74	76	75	75	76	68	
5000	62	64	65	71	72	72	68	63	68	67	67	67	64	65	67	68	68	68	61	
6300	57	58	61	65	67	68	63	59	63	61	63	62	62	62	61	62	63	62	56	
8000	52	52	55	58	61	61	58	53	57	55	57	55	54	54	55	55	54	54	54	
10000	47	47	49	52	55	55	52	47	51	49	50	48	47	47	47	47	48	48	59	
OVERALL	98	96	97	98	97	98	97	94	95	94	92	91	92	93	94	94	95	99	98	

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE 1 NORMALIZED FARFIELD NOISE LEVELS

3 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:

F-106 AIRCRAFT IN THE

AF32A-1 SUPPRESSOR

ENGINE J79-P-17

FAR FIELD NOISE

OPERATION:

IDLE POWER (59% RPM)

SINGLE ENGINE

GROUND RUNUP (SUPPRESSED)

METEOROLOGY:

TEMP = 15 C

BAR PRESS = .760 H MG

REL HUMID = 78 %

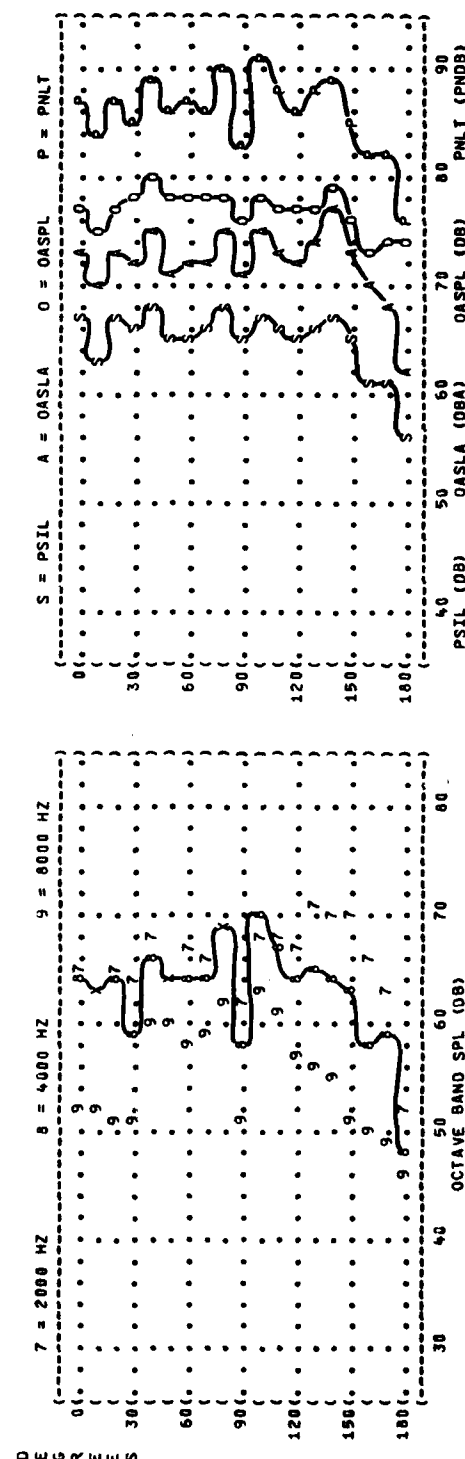
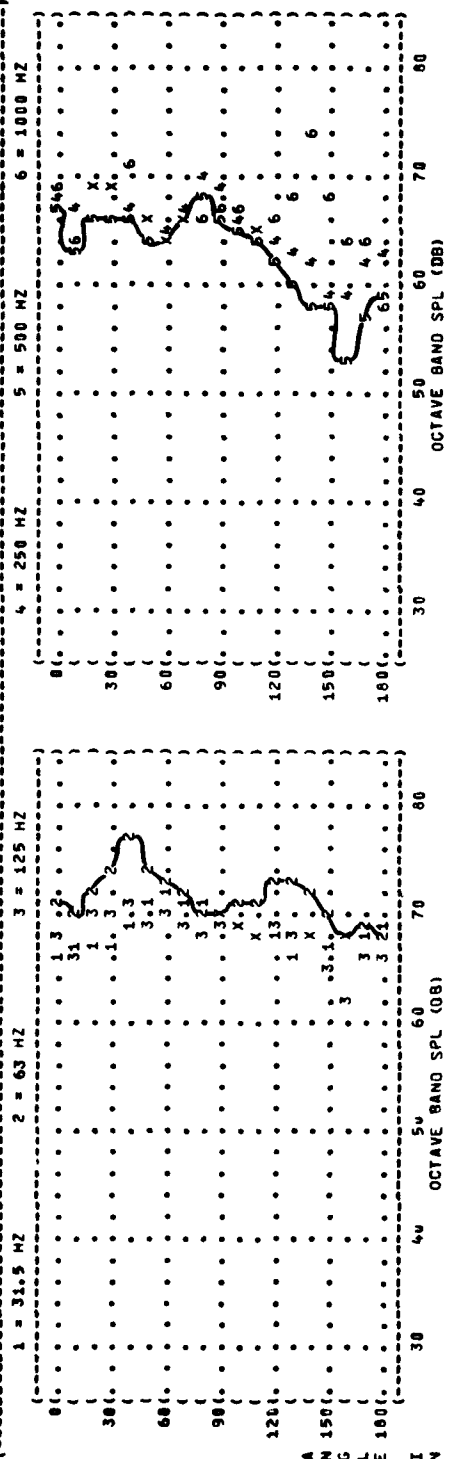
OMEGA 1.4

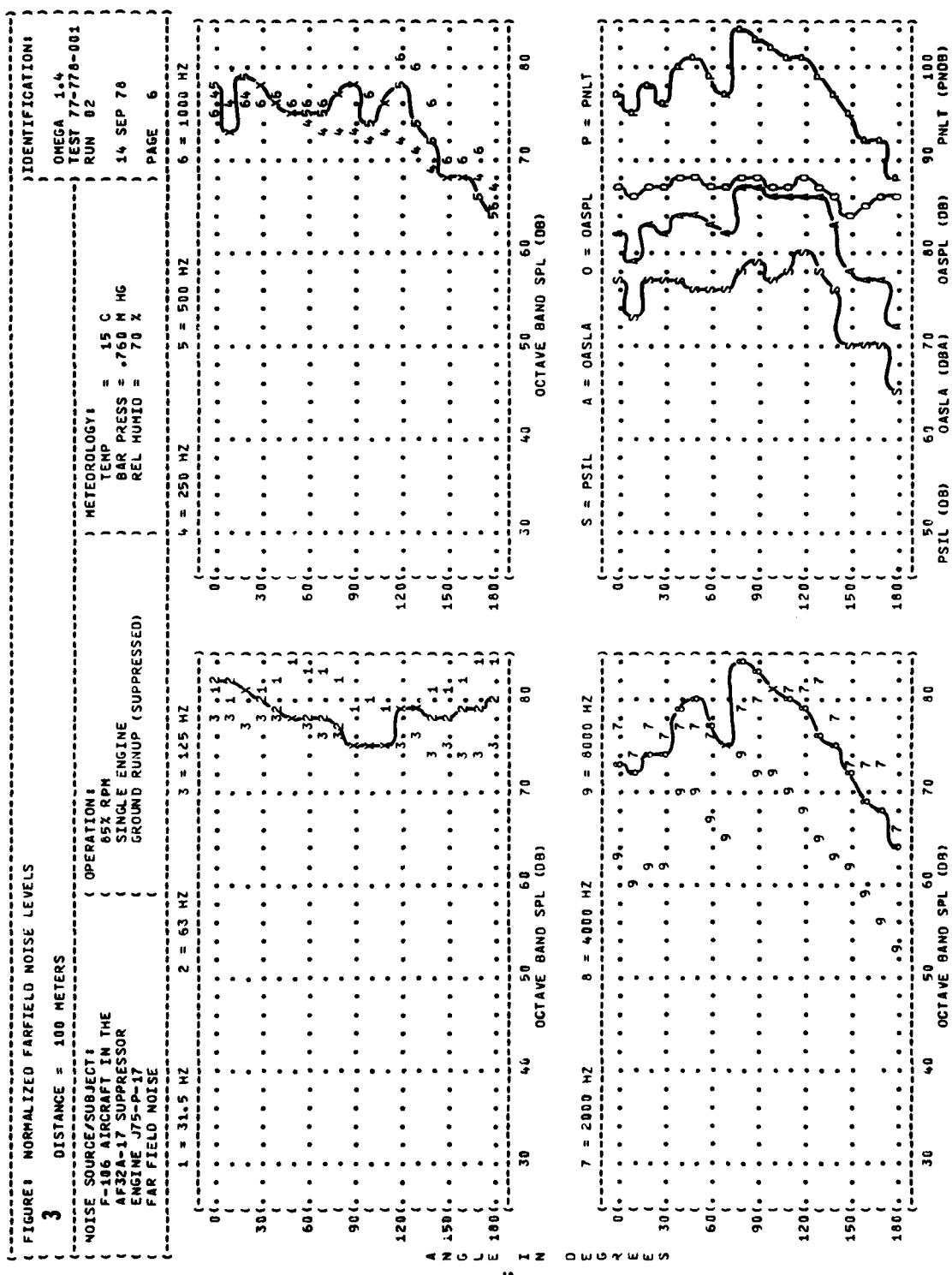
TEST 77-778-001

RUN 81

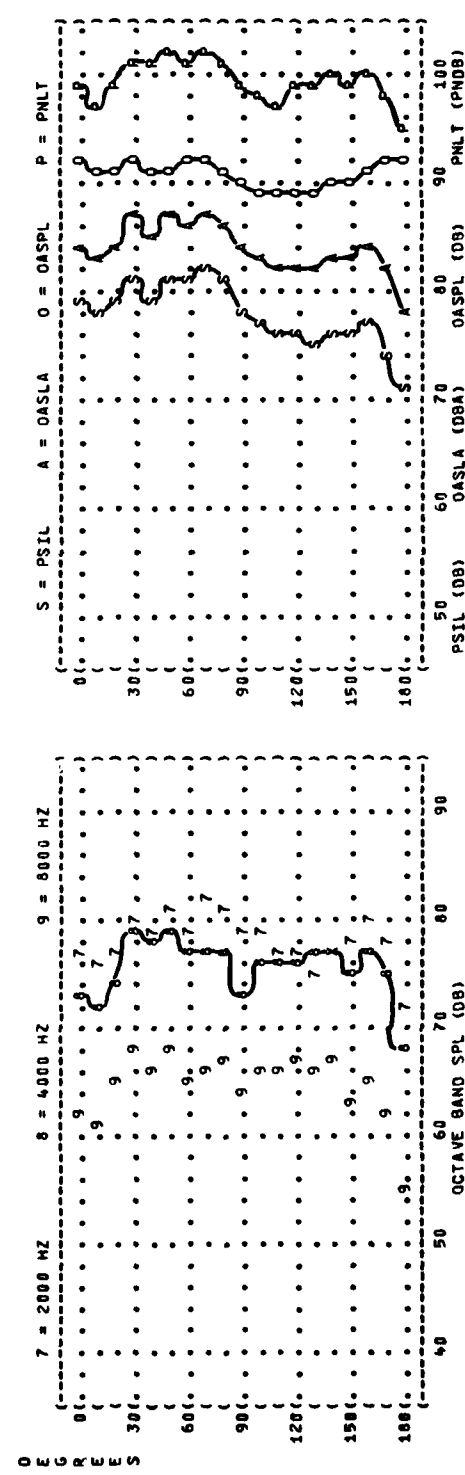
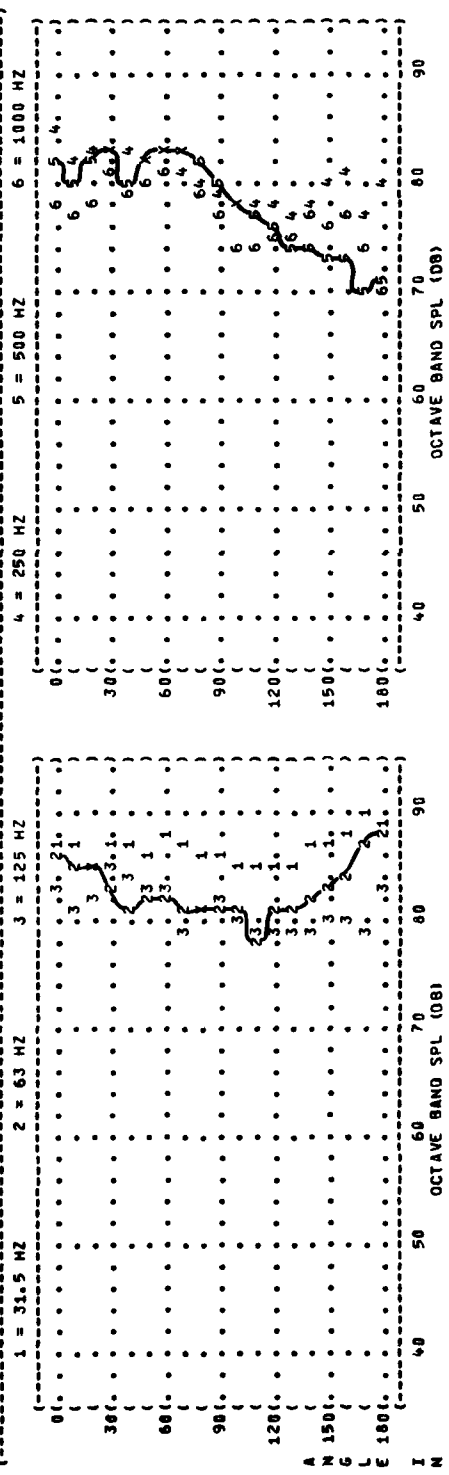
14 SEP 78

PAGE 6

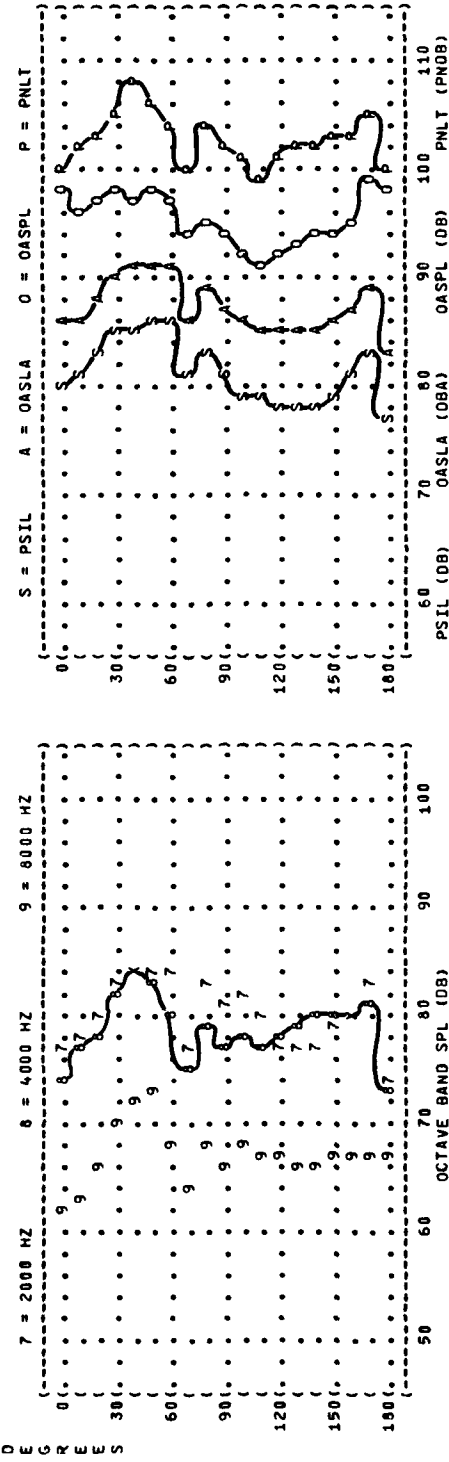
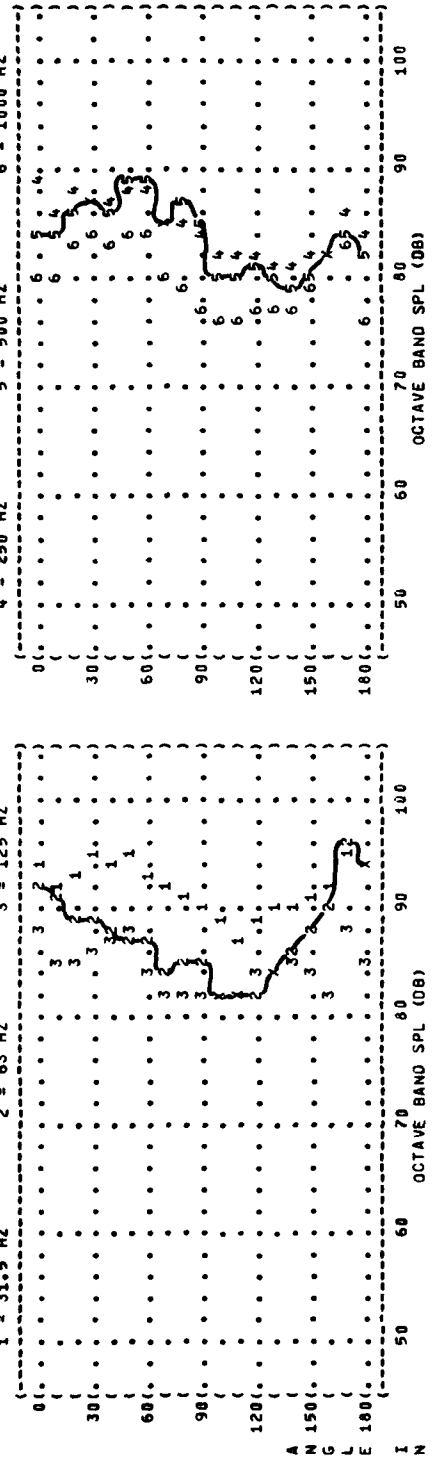




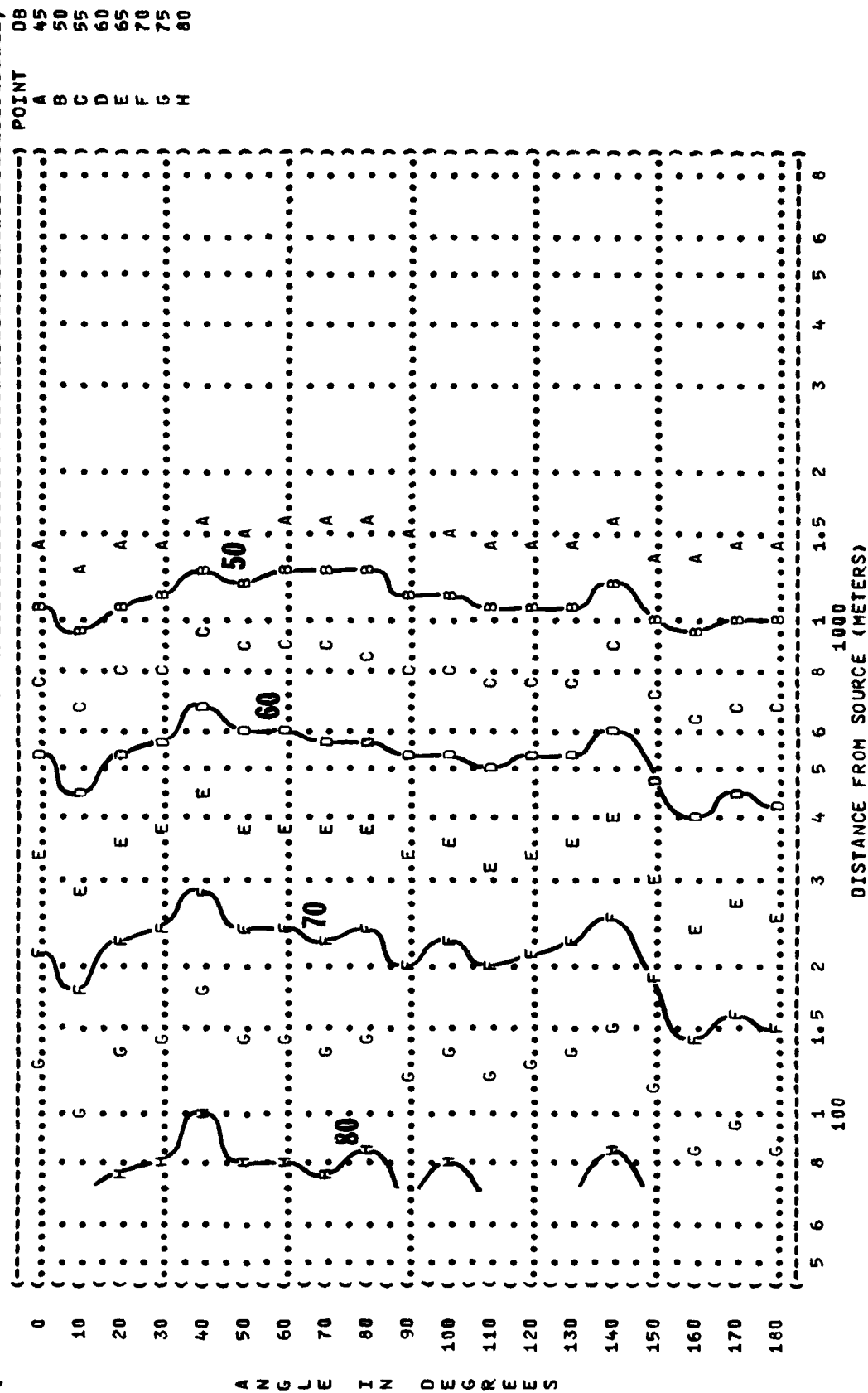
(FIGURE 1 NORMALIZED FARFIELD NOISE LEVELS)
 (3 DISTANCE = 100 METERS)
 (NOISE SOURCE/SUBJECT)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION)
 (95% RPM)
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 (METEOROLOGY)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 (IDENTIFICATION)
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 03)
 (14 SEP 78)
 (PAGE 6)



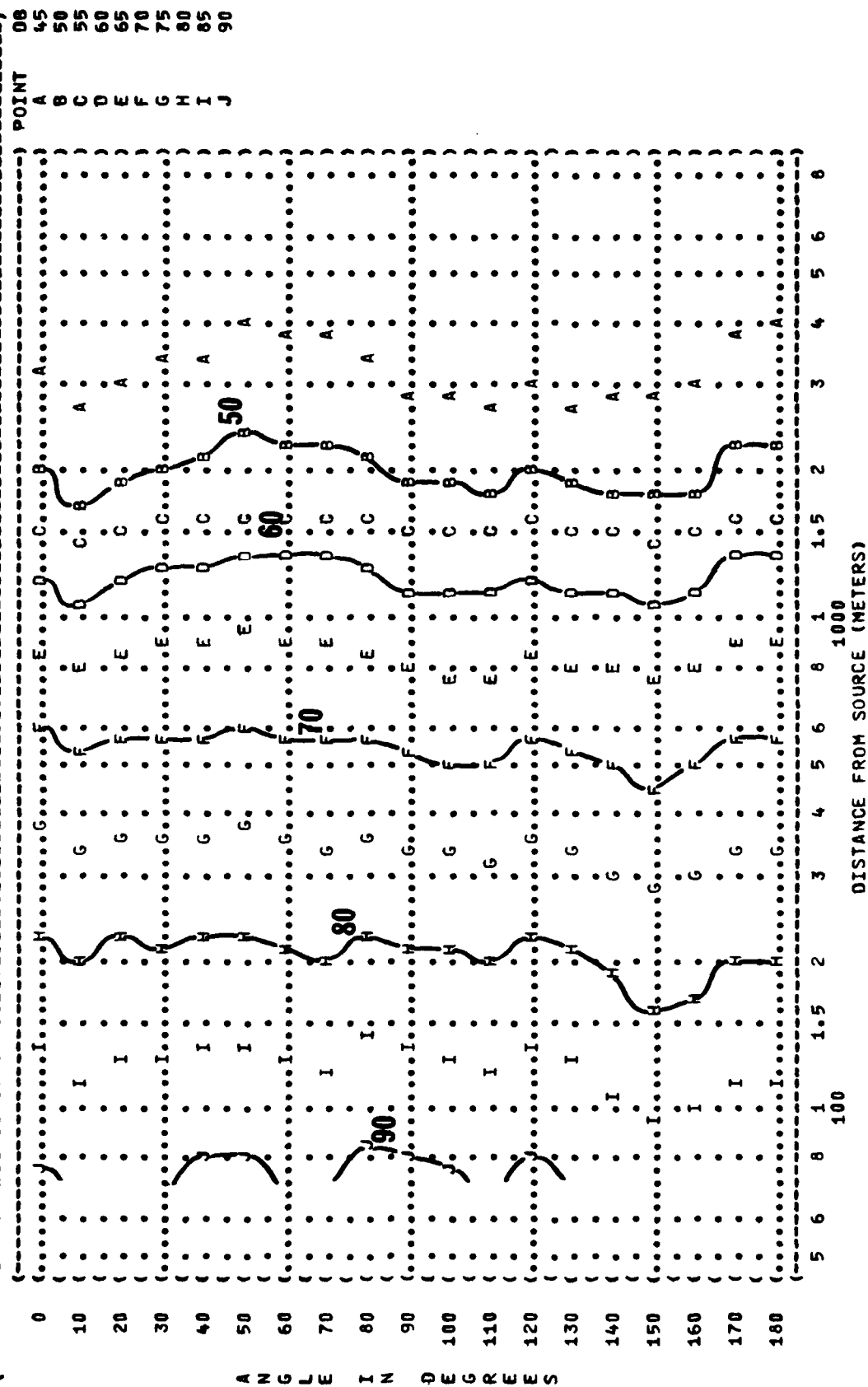
((FIGURE 1 NORMALIZED FARFIELD NOISE LEVELS ((IDENTIFICATION)
 ((3 DISTANCE = 100 METERS ((OMEGA 1.4
 ((NOISE SOURCE/SUBJECT 1 ((TEST 77-778-001
 ((F-106 AIRCRAFT IN THE ((RUN 05
 ((AF32A-17 SUPPRESSOR ((TEMP = 15 C
 ((ENGINE J75-P-17 ((BAR PRESS = .760 M HG
 ((FAR FIELD NOISE ((REL HUMID = 70 %
 ((14 SEP 78
 ((PAGE 6



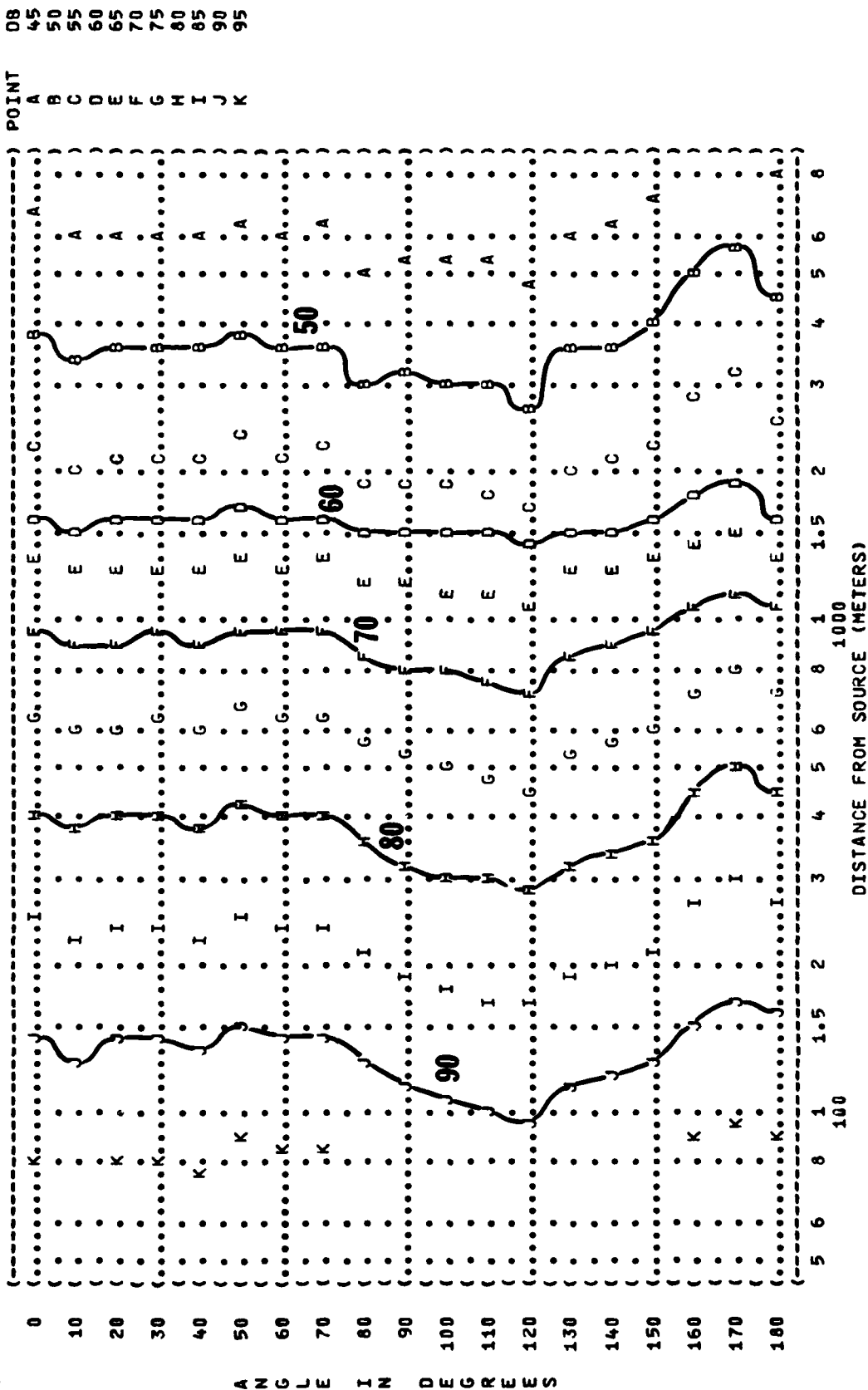
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(-----)
( ( FIGURE: OVERALL SOUND PRESSURE LEVEL {OASPL} ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) )
( ( 4 ) OMEGA 1.4 )
(-----)
( ( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( ( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG )
( ( ENGINE J75-P-17 ) REL HUMID = 70 % )
( ( FAR FIELD NOISE ) PAGE 13 )
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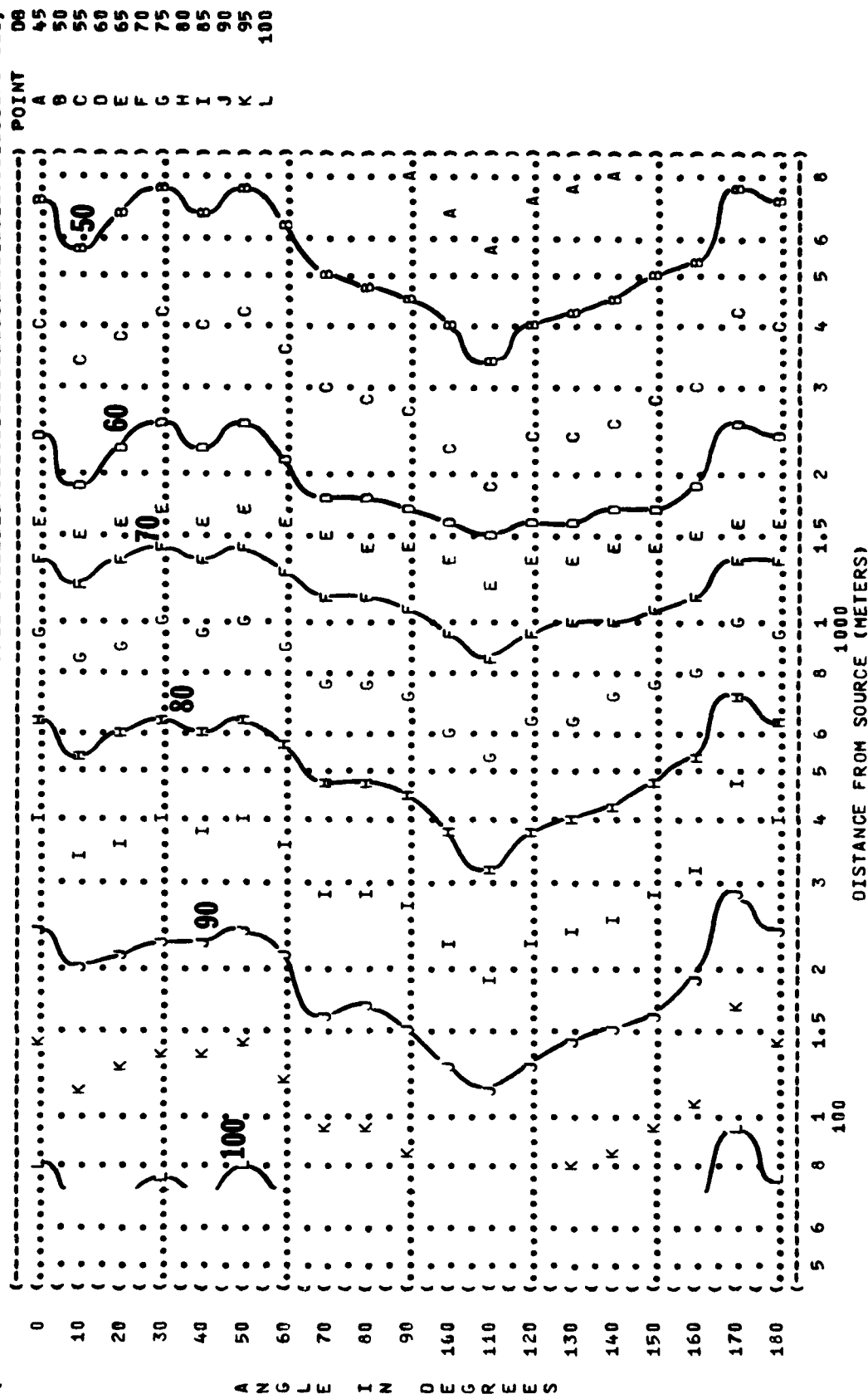
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( FIGURE: OVERALL SOUND PRESSURE LEVEL (OASPL) ) IDENTIFICATION: )
(      4 EQUAL LEVEL CONTOURS (DB) ) )
( ) ) OMEGA 1.4 )
( ) ) TEST 77-778-001 )
( ) ) RUN 02 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 13 )
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( FIGURE: OVERALL SOUND PRESSURE LEVEL (OASPL) ) IDENTIFICATION: )
( 4 EQUAL LEVEL CONTOURS (DB) ) )
( ) )
( ) ) OMEGA 1.4 )
( ) ) TEST 77-778-001 )
( ) ) RUN 04 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 13 )
(-----)
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(-----)
( FIGURE: OVERALL SOUND PRESSURE LEVEL (OASPL) ) IDENTIFICATION:
( 4 EQUAL LEVEL CONTOURS (DB) ) )
( ) ) OMEGA 1.4
( ) ) TEST 77-776-001
( ) ) RUN 05
( ) ) METEOROLOGY:
( NOISE SOURCE/SUBJECT: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C
( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG
( ENGINE J75-P-17 ) REL HUMID = 70 %
( FAR FIELD NOISE ) PAGE 13
(-----)
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TEST 77-77

RUN 02

TEMP

BAR PRESS = .760 H %
REF HUMID = 70

PAGE 14

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(85% RPM

**SINGLE ENGINE
GROUND RUNUP**

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F-106 AIRCRAFT IN THE

AF 32A-17 SUPPRESSOR
ENGINE J75-P-17

FAR FIELD NOISE

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(X FIGURE: C-WEIGHTED OVERALL SOUND LEVEL {OASLC} ) IDENTIFICATION: )
( EQUAL LEVEL CONTOURS (DBC) ) ) )
( 5 ----- ) OMEGA 1.4 )
( ) TEST 77-778-001 )
( ) RUN 04 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) REL HUMID = 70 % )
( FAR FIELD NOISE ) PAGE 14 )
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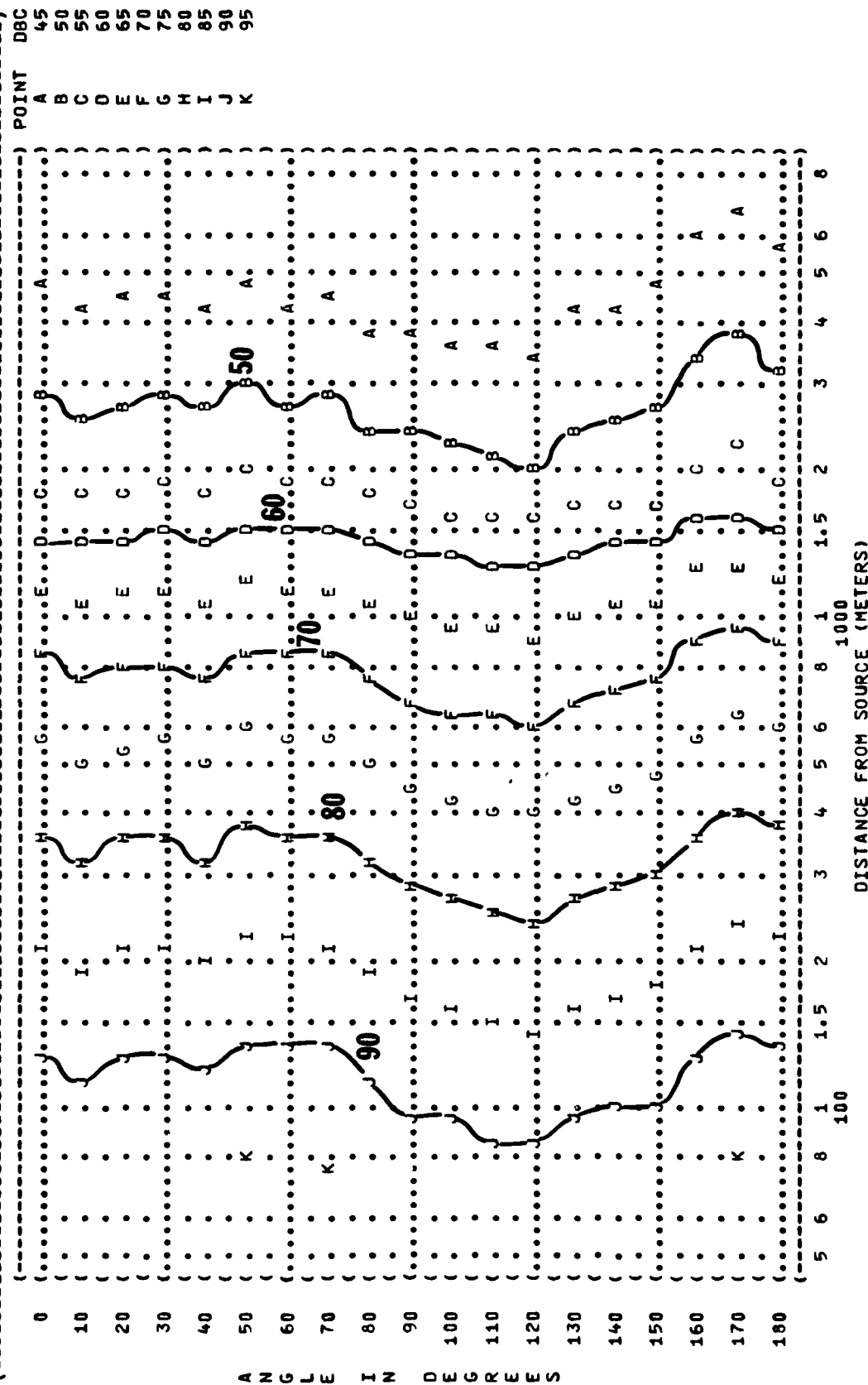


FIGURE 1 A-WEIGHTED OVERALL SOUND LEVEL (OASLA)
 EQUAL LEVEL CONTOURS (DBA)

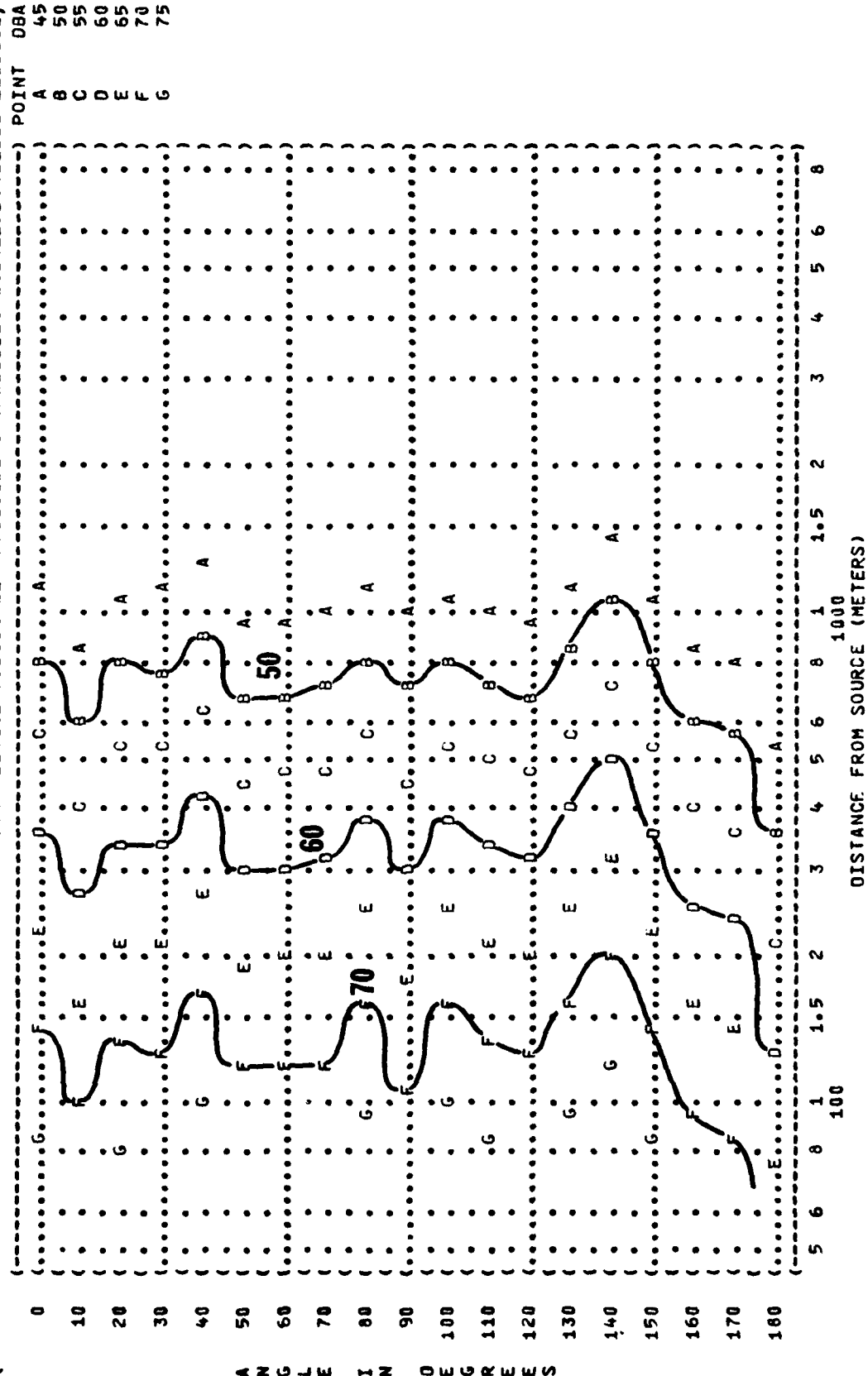
IDENTIFICATION:
 OMEGA 1.4
 TEST 77-778-001
 RUN 01

NOISE SOURCE/SUBJECT:
 F-106 AIRCRAFT IN THE
 AF32A-17 SUPPRESSOR
 ENGINE J75-P-17
 FAR FIELD NOISE

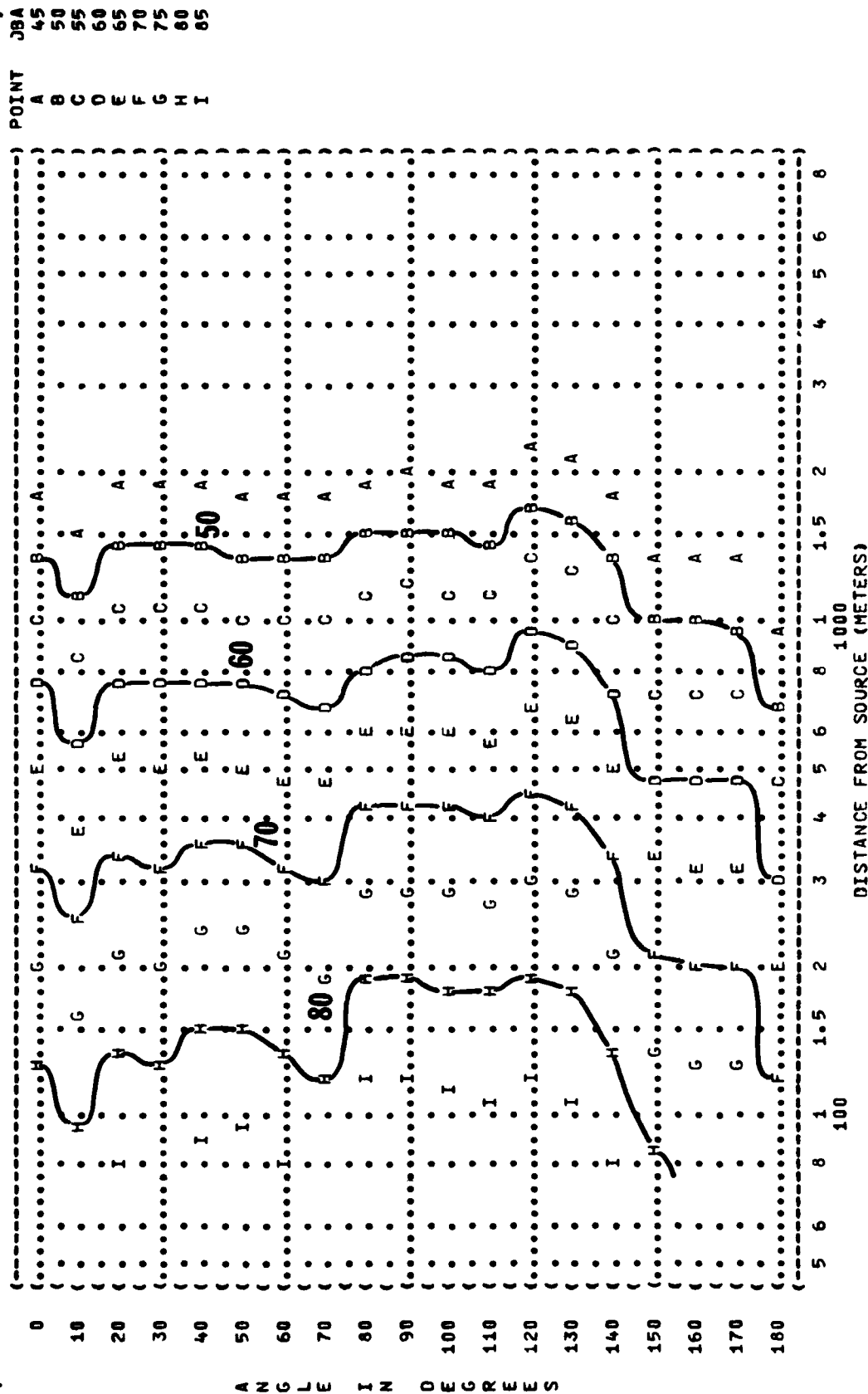
OPERATION:
 IDLE POWER (59% RPM)
 SINGLE ENGINE
 GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
 TEMP = 15 C
 BAR PRESS = .760 M HG
 REL HUMID = 70 %

PAGE 15



(FIGURE: A-WEIGHTED OVERALL SOUND LEVEL (OASLA)) IDENTIFICATION:)
 (6) EQUAL LEVEL CONTOURS (DBA)) OMEGA 1.4)
 ()) TEST 77-778-001)
 ()) RUN 02)
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE (85% RPM) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE ()) PAGE 15)




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(-----)
( FIGURE: A-WEIGHTED OVERALL SOUND-LEVEL (OASLA) )
(      6      EQUAL LEVEL CONTOURS (DBA) )
( )
( )
( ) OMEGA 1.4 )
( ) TEST 77-778-001 )
( ) RUN 04 )
( ) METEOROLOGY: )
( ) TEMP = 15 C )
( ) BAR PRESS = .760 M HG )
( ) REL HUMID = 70 % )
( ) PAGE 15 )
(-----)
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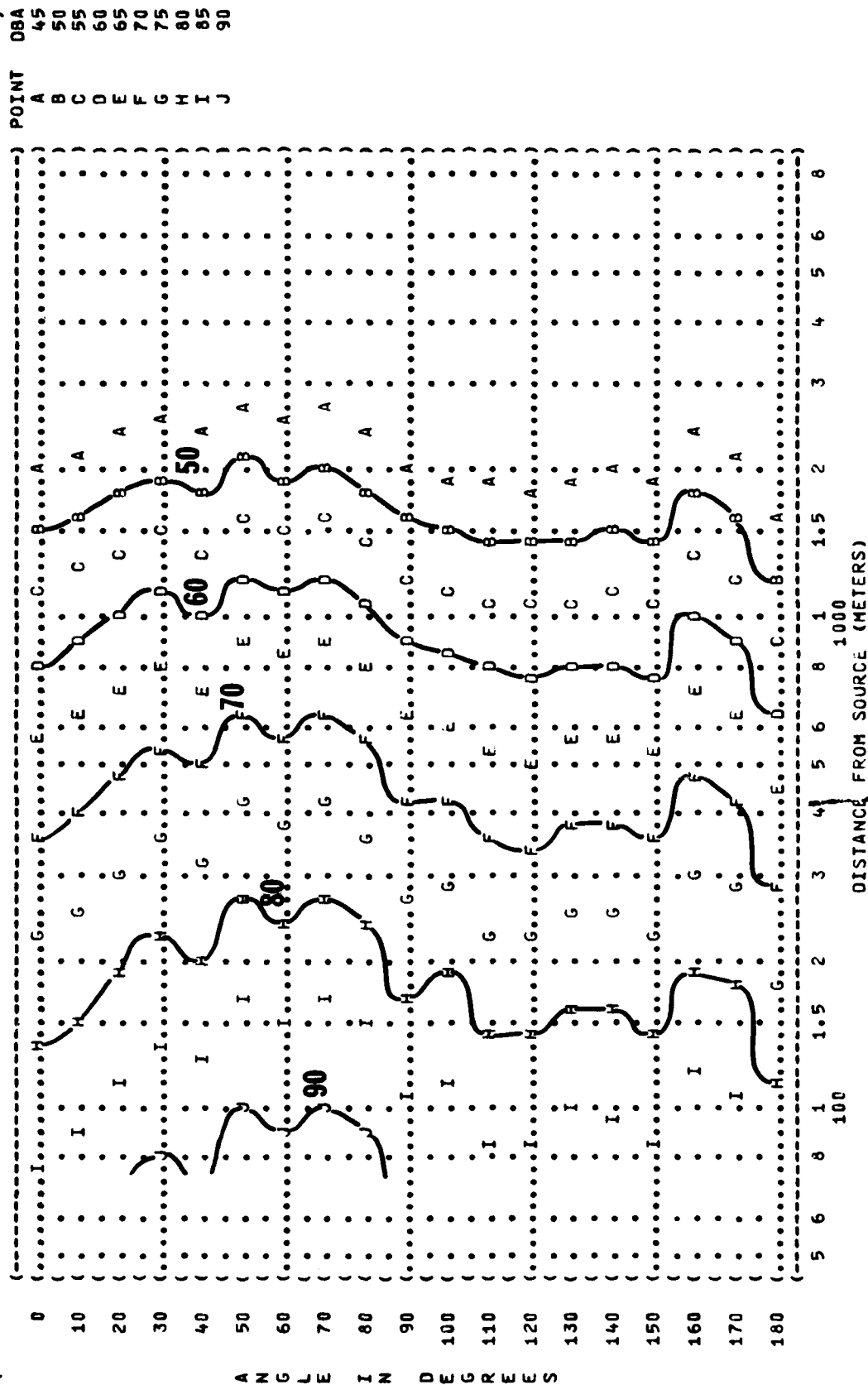
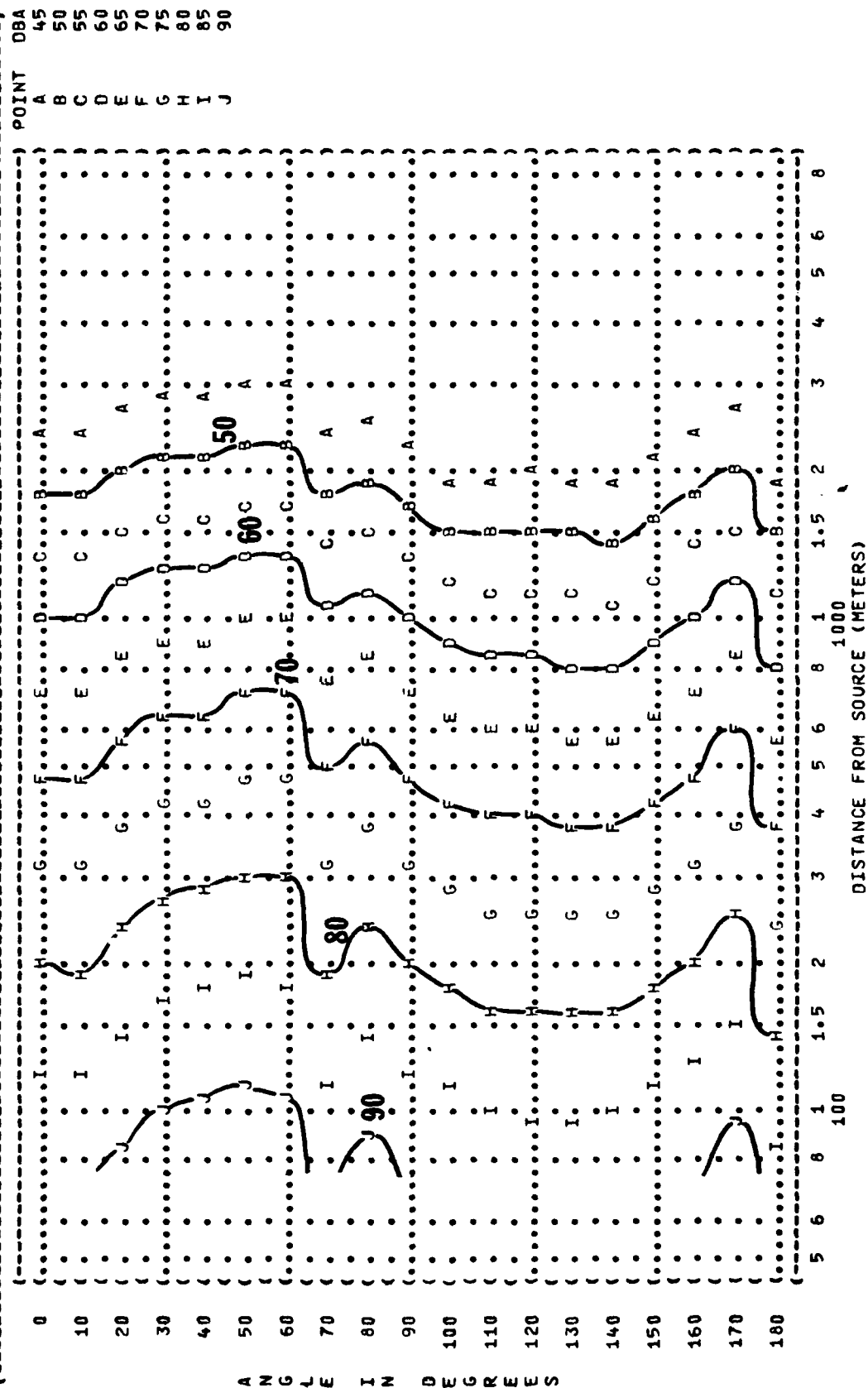


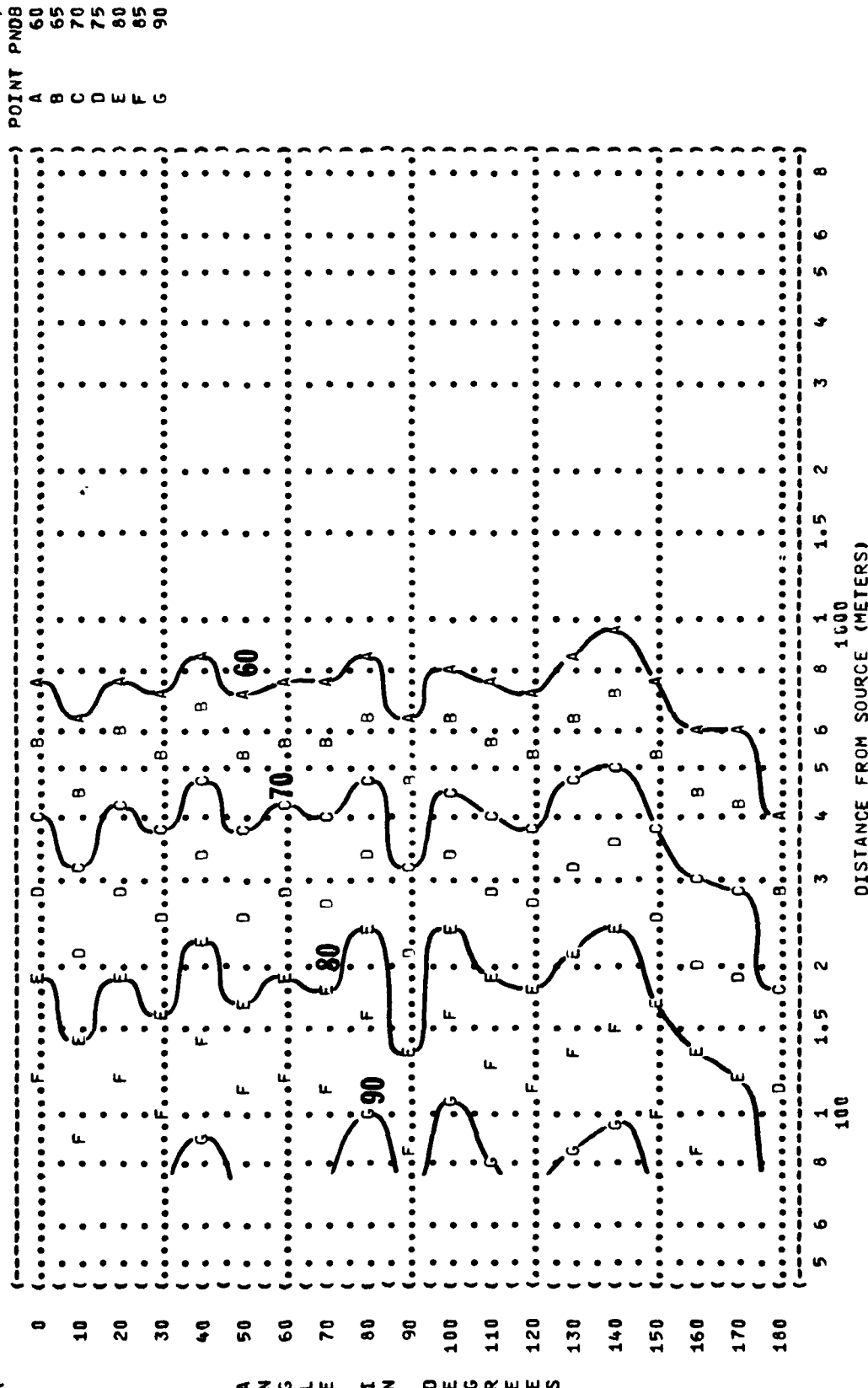
FIGURE 1 A-WEIGHTED OVERALL SOUND LEVEL (OASLA)
 6 EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
 OMEGA 1.4
 TEST 77-778-001
 RUN 05
 24 JAN 79
 PAGE 15

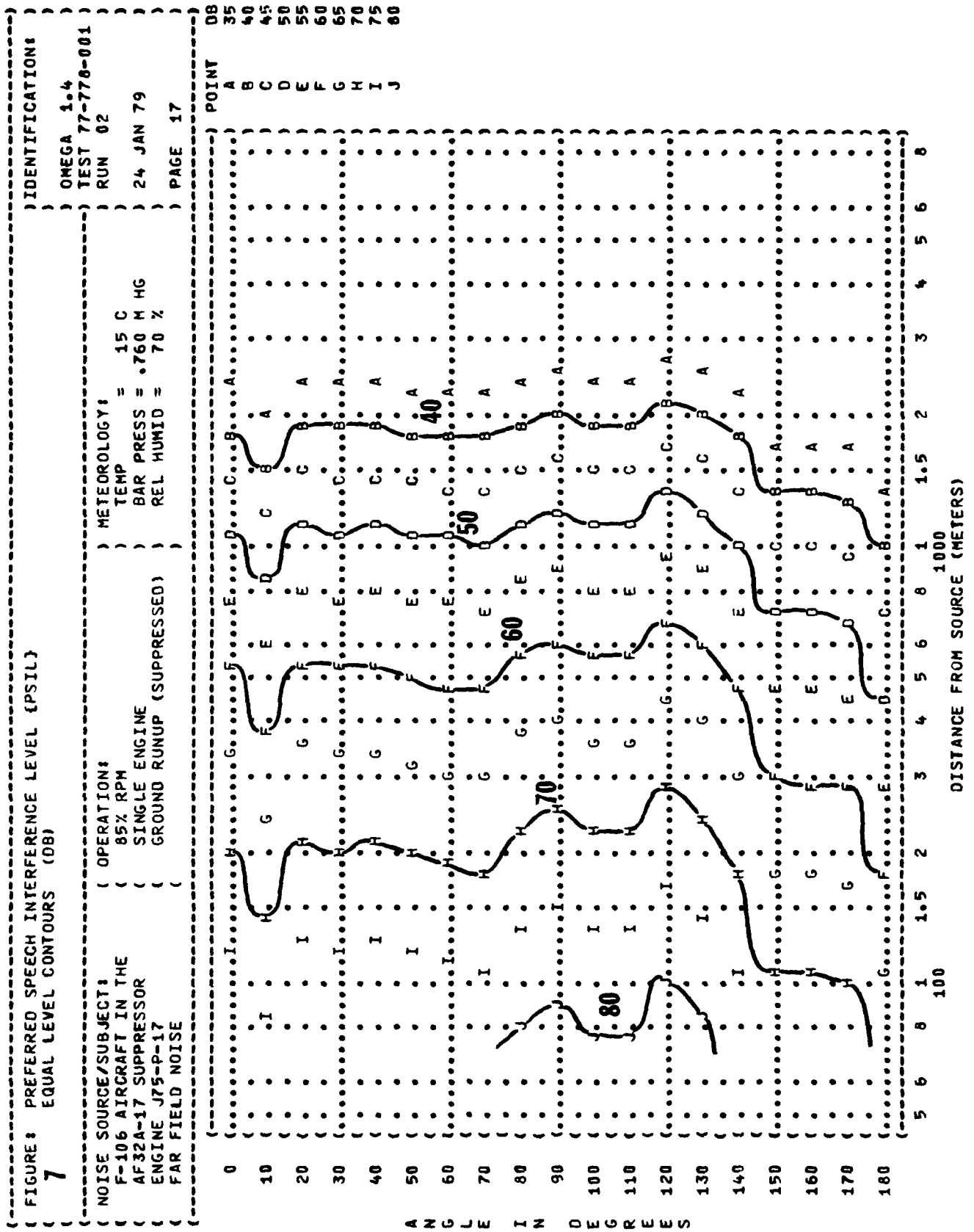
NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:
 F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C
 AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 FAR FIELD NOISE ()



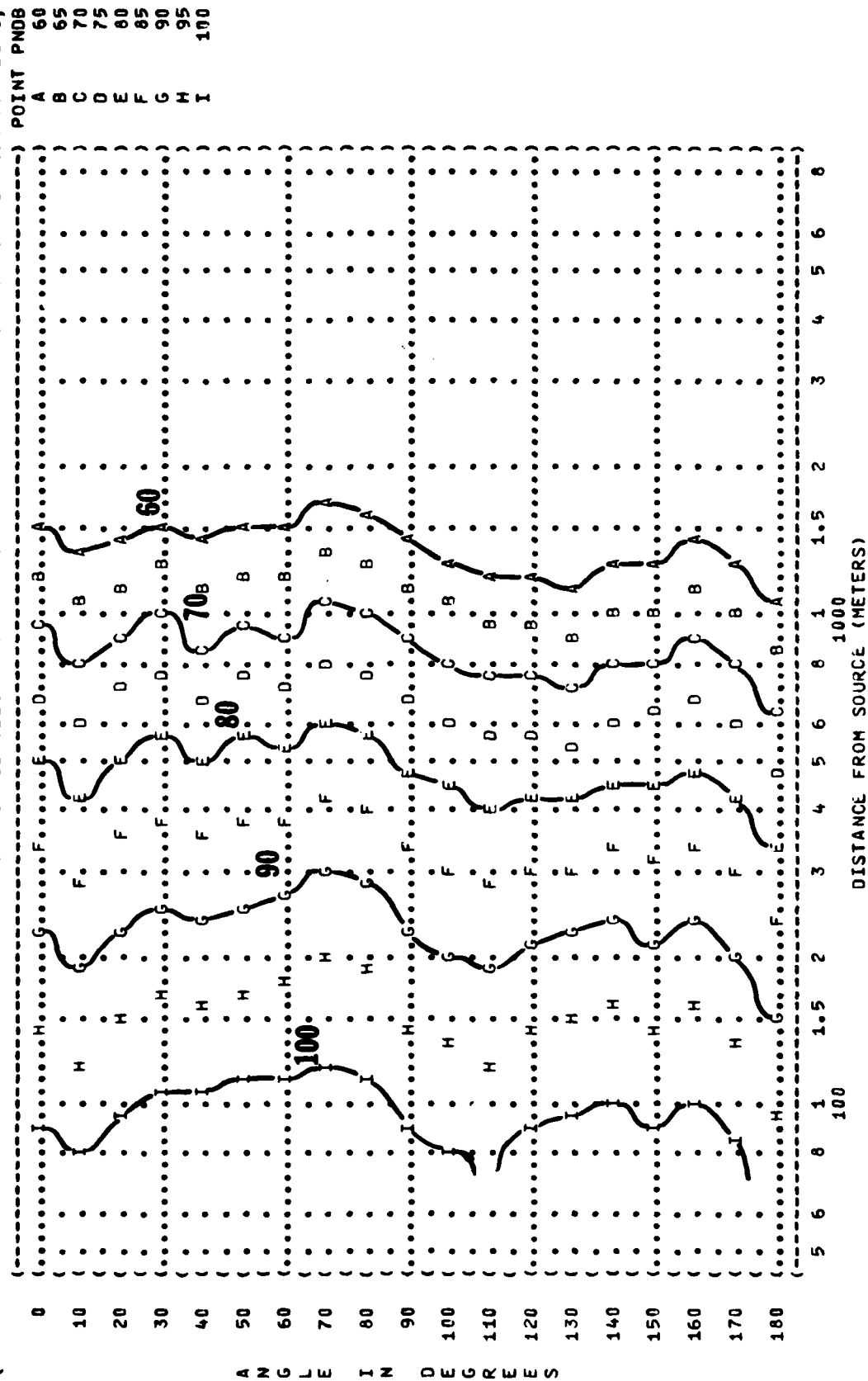
(FIGURE: PERCEIVED NOISE LEVEL, TONE CORRECTED {PNLT}
 (7
 (EQUAL LEVEL CONTOURS (PNDB)
 () IDENTIFICATION:)
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 01
 () METEOROLOGY:)
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () 24 JAN 79
 () PAGE 16
 ()



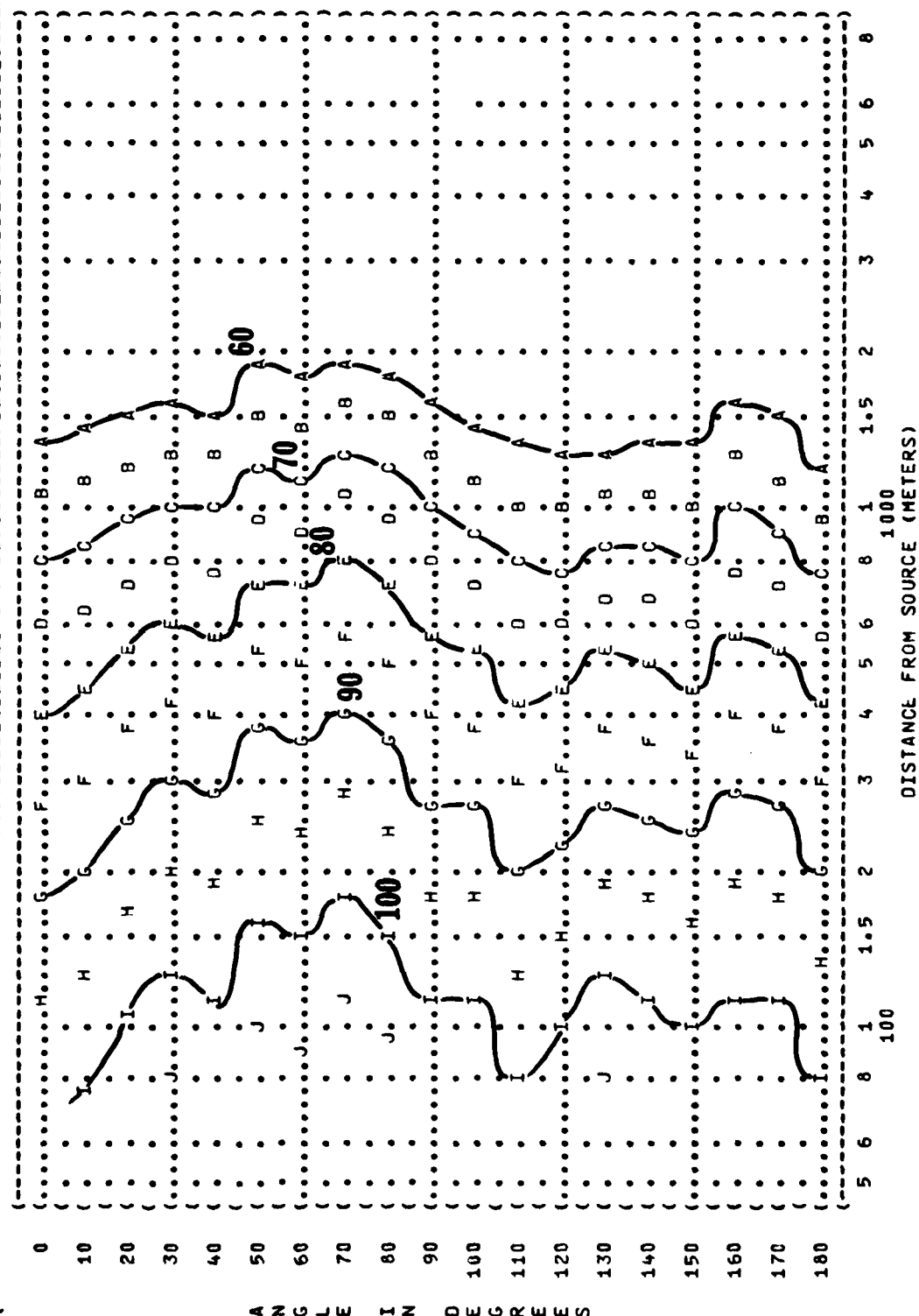
A N G L E I N D E G R E E S



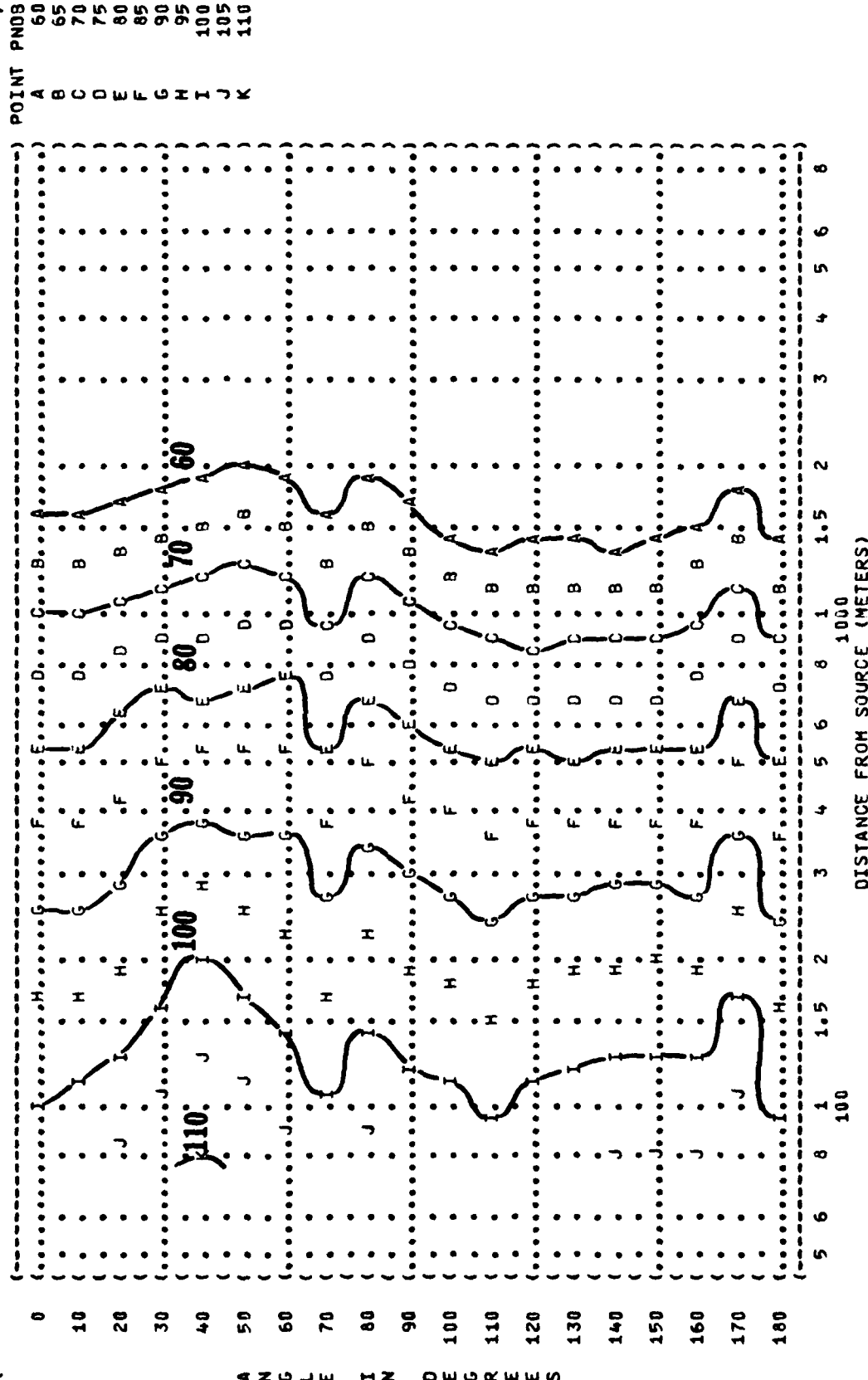
(FIGURE: PERCEIVED NOISE LEVEL, TONE CORRECTED {PNLT}
 (7
 (EQUAL LEVEL CONTOURS (PNDB)
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 () IDENTIFICATION:
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 () OMEGA 1.4
 () TEST 77-778-001
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 (NOISE SOURCE/SUBJECT:) METEOROLOGY:
 (F-106 AIRCRAFT IN THE) TEMP = 15 C
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE))
 () PAGE 16
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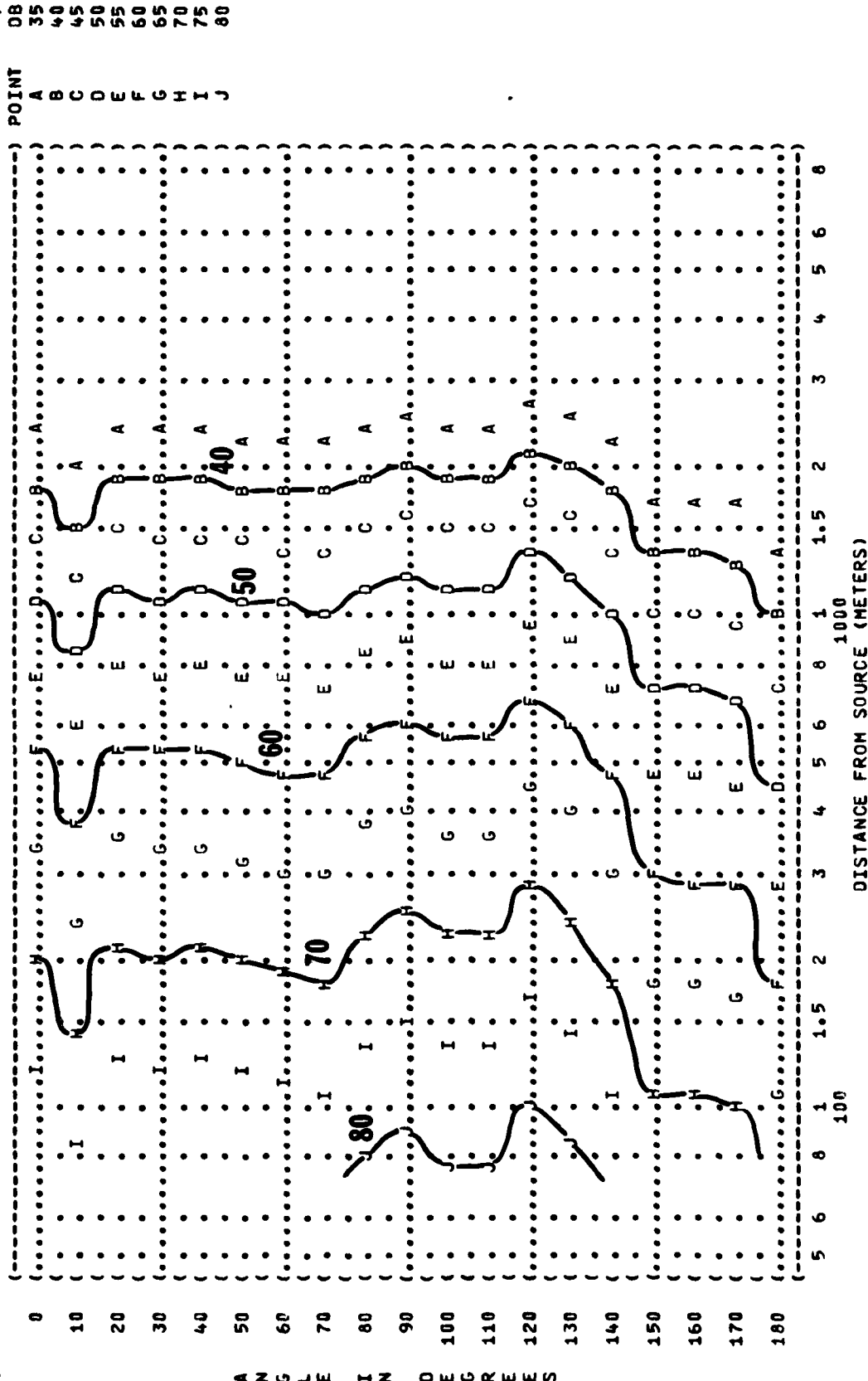


(FIGURE: PERCEIVED NOISE LEVEL, TONE CORRECTED (PNLT))
 (7 EQUAL LEVEL CONTOURS (PNDB))
 () IDENTIFICATION:)
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 05)
 () METEOROLOGY:)
 () TEMP = 15 C)
 () BAR PRESS = .760 M HG)
 () REL HUMID = 70 %)
 () 14 SEP 78)
 () PAGE 16)

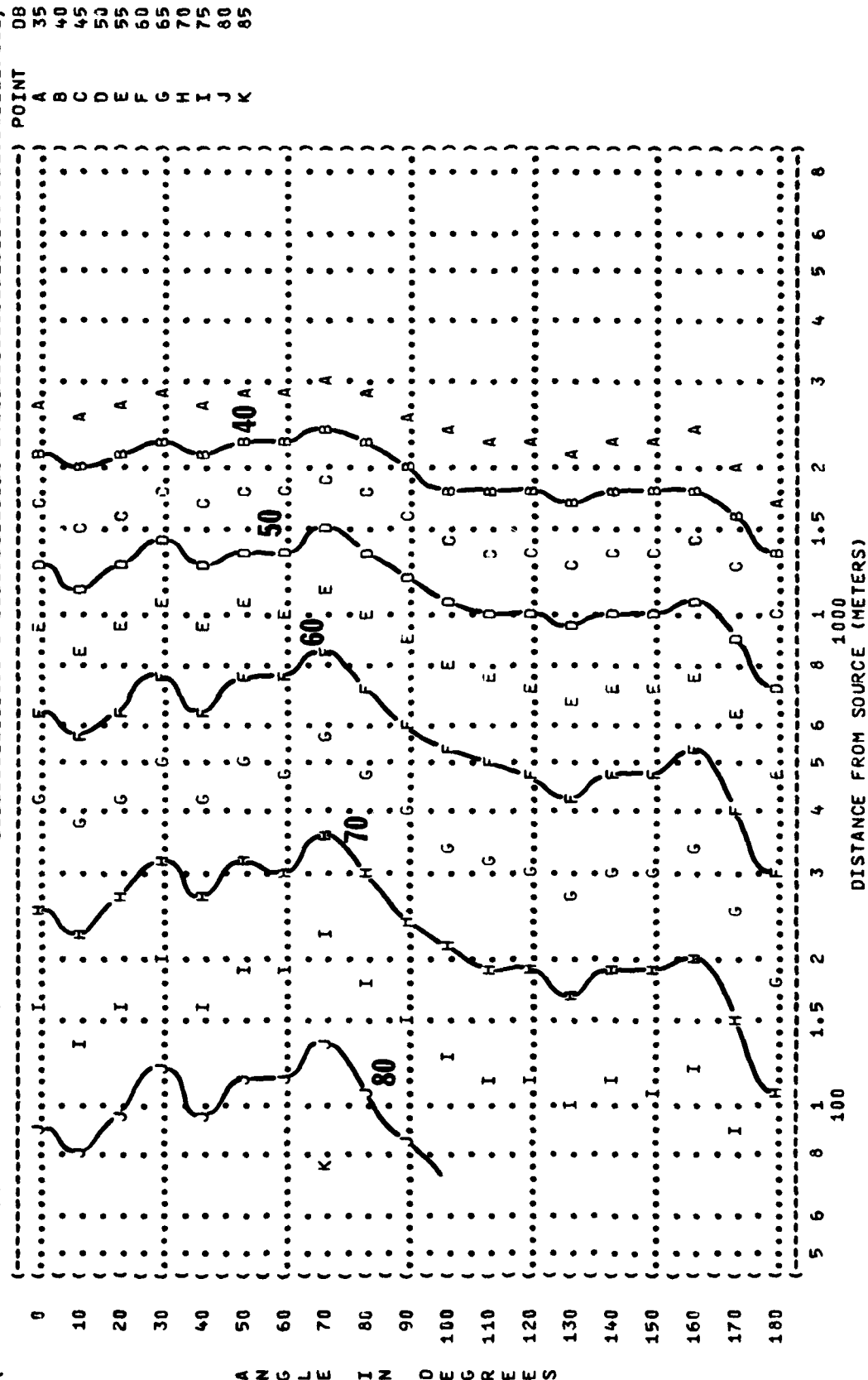


A N G L E I N D E G R E E S

(FIGURE: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL)
 (8
 (EQUAL LEVEL CONTOURS (DB)
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 02
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () 14 SEP 78
 () REL HUMID = 70 %
 () PAGE 17
 ()




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(-----)
( FIGURE: PREFERRED SPEECH INTERFERENCE LEVEL {PSIL})
(      8      EQUAL LEVEL CONTOURS (DB))
( )
( ) OMEGA 1.4
( ) TEST 77-778-001
( ) RUN 03
( ) METEOROLOGY:
( F-106 AIRCRAFT IN THE ) TEMP = 15 C
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 %
( FAR FIELD NOISE )
(-----)
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IDENTIFICATION:

EQUAL LEVEL CONTOURS (DB)

OMEGA 1.4
TEST 77-778-001

70 NR8
RUN 04

METEOROLOGY:

! OPERATION:

NOISE SOURCE/SUBJECT:

•

TEMP = 15 C

(MILITARY POWER (100% RPM))

F-106 AIRCRAFT IN THE

24 JAN 79

BAR PRESS = .760 M HG

(SINGLE ENGINE

AF32A-17 SUPPRESSOR

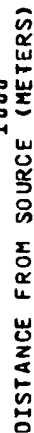
REL HUMID = 70 %

((GROUND RUNUP (SUPPRESSED)

ENGINE J75-P-17

PAGE 17

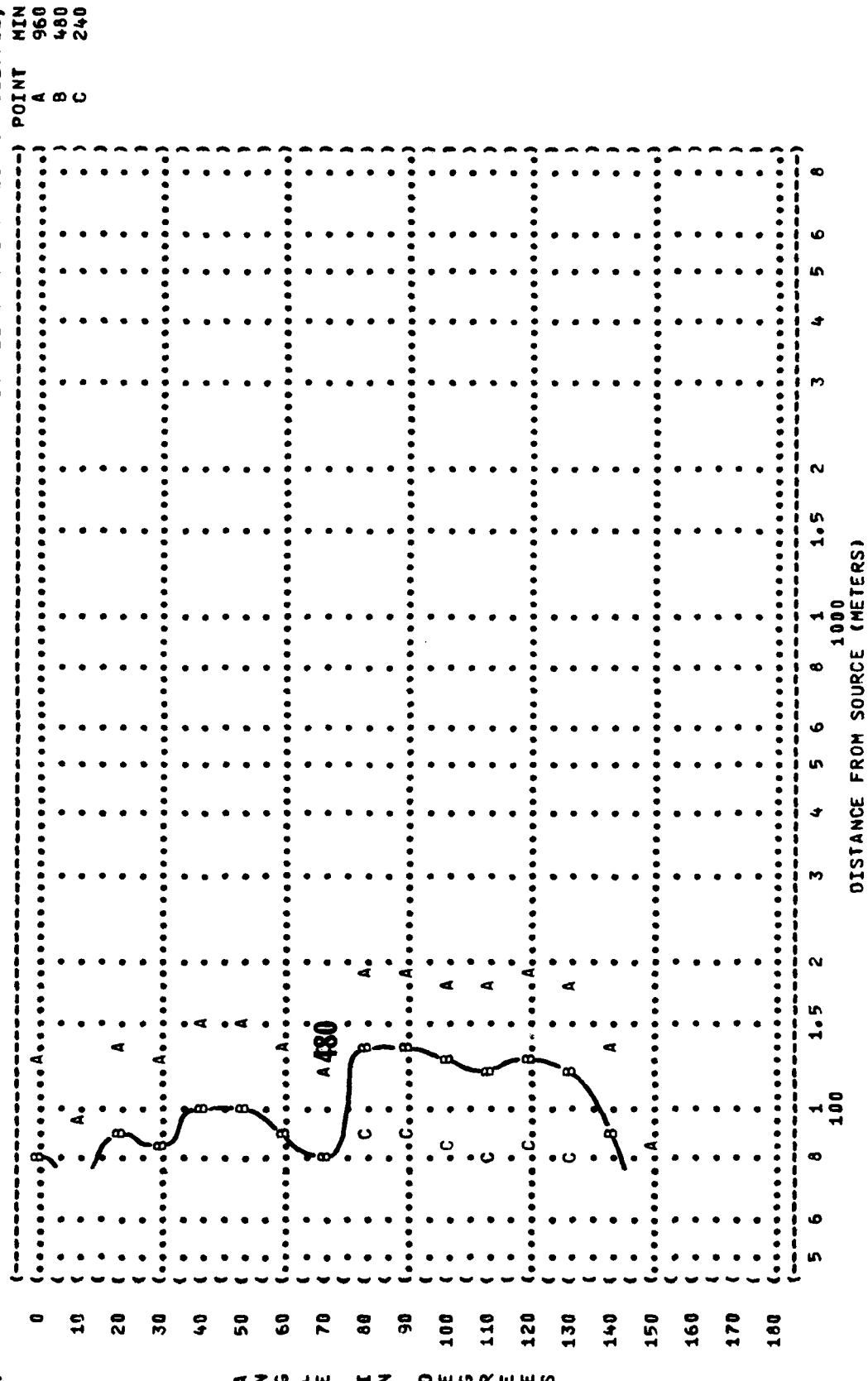
FAR FIELD NOISE




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( ( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION:
( ( 9 EQUAL TIME CONTOURS (MINUTES) ) )
( ( NO PROTECTION ) )
( (-----) )
( ( NOISE SOURCE/SUBJECT: ) ) METEOROLOGY:
( ( F-106 AIRCRAFT IN THE ) ) TEMP = 15 C
( ( AF32A-17 SUPPRESSOR ) ) SINGLE ENGINE ) BAR PRESS = .760 M HG
( ( ENGINE J75-P-17 ) ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 %
( ( FAR FIELD NOISE ) ) )
( (-----) )
( ( TEST 77-778-001 ) ) RUN 02
( (-----) )
( ( OMEGA 1.4 ) )
( (-----) )
( ( PAGE 7 ) )

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(-----)
( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION:
( ( ) ) ,
( 9 ) OMEGA 1.4
( ) )
( ) TEST 77-7778-001
( ) )
( NOISE SOURCE/SUBJECT: ) OPERATION: ) METEOROLOGY:
( F-106 AIRCRAFT IN THE ) ( 85% RPM ) TEMP = 15 C
( AF32A-17 SUPPRESSOR ) ( SINGLE ENGINE ) BAR PRESS = .760 M HG
( ENGINE J75-P-17 ) ( GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 %
( FAR FIELD NOISE ) ( )
(-----)
( PAGE 8 )
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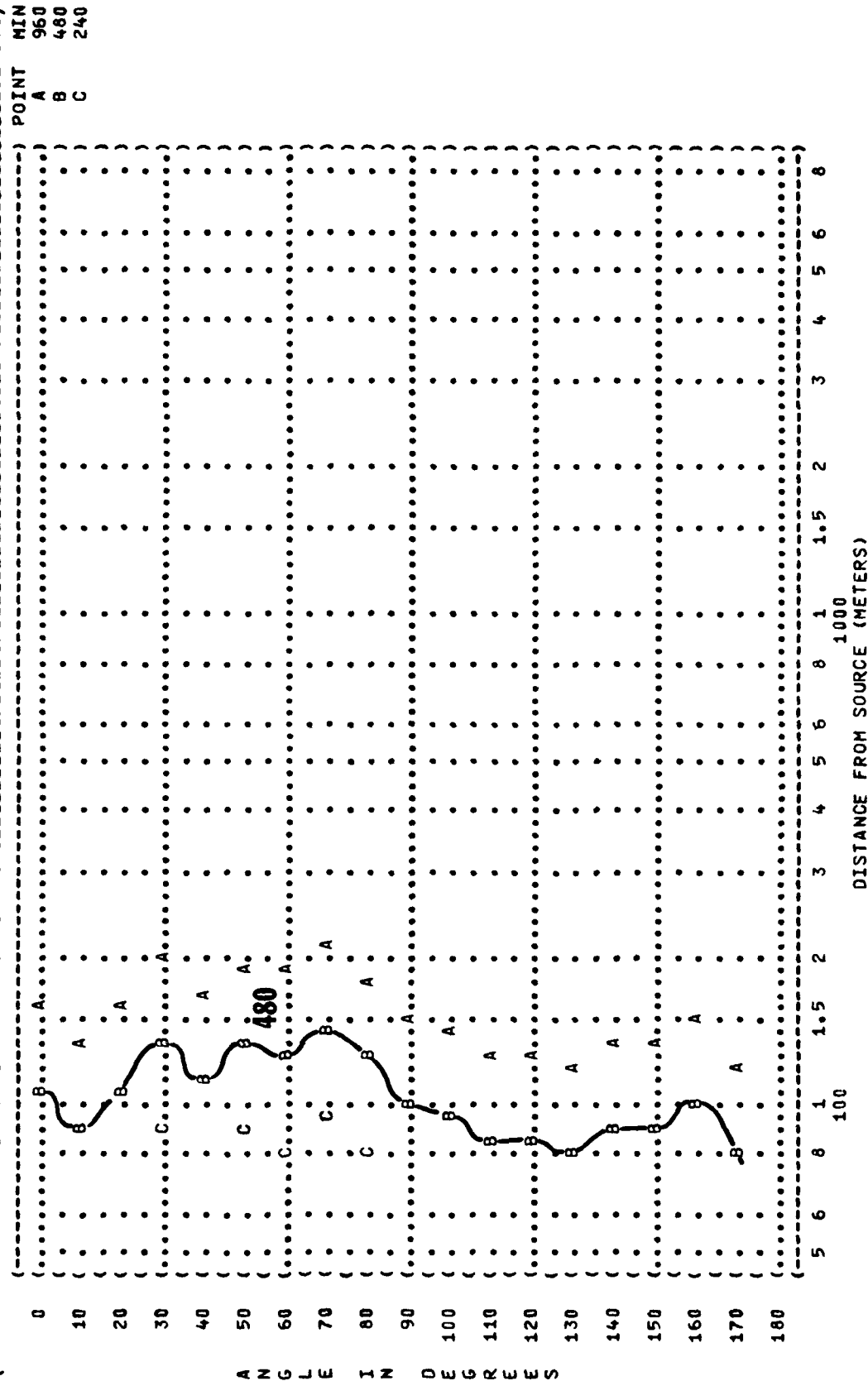
PERSONNEL MAY BE EXPOSED UP TO 960 MINUTES PER DAY
AT ALL DISTANCES FROM SOURCE EQUAL TO OR GREATER THAN 75 METERS
FOR ALL ANGLES EVALUATED (INDICATED BY \angle AT LEFT)
UNDER THE FOLLOWING EAR PROTECTION CONDITIONS:

MINIMUM QPL EAR MUFFS
AMERICAN OPTICAL 1700 EAR MUFFS
V-51R EAR PLUGS
COMFIT TRIPLE FLANGE EAR PLUGS
H-133 GROUND COMMUNICATION UNIT

DISTANCE FROM SOURCE (METERS)

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(-----)
( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION: )
( ( 9 EQUAL TIME CONTOURS (MINUTES) ) ) )
( ( NO PROTECTION ) ) OMEGA 1.4 )
(-----)
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 7 )
(-----)
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(FIGURE: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)) IDENTIFICATION:)
 (9 EQUAL TIME CONTOURS (MINUTES)))
 () OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 03)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE)) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE)))
 () PAGE 8)

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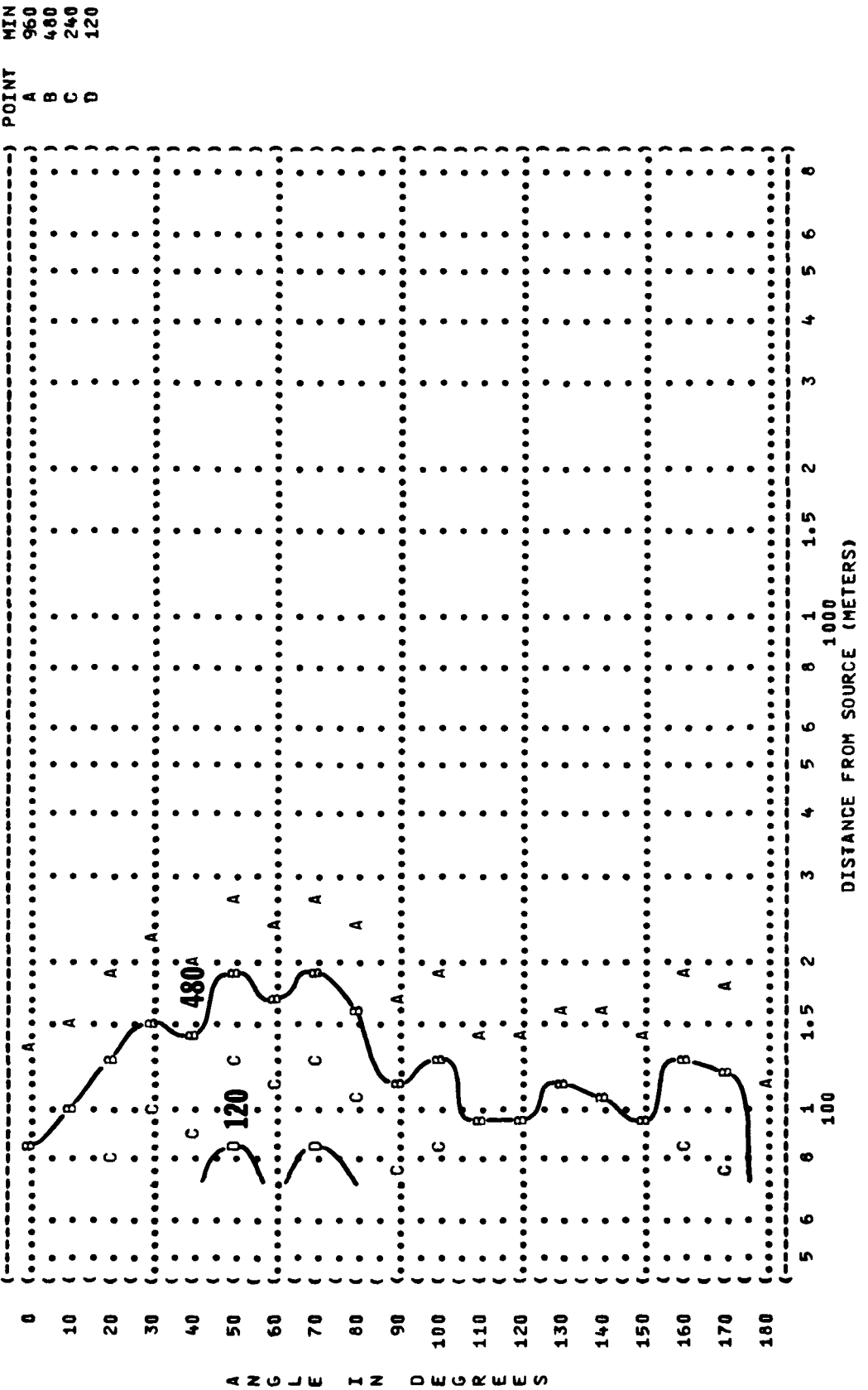
PERSONNEL MAY BE EXPOSED UP TO 960 MINUTES PER DAY
 AT ALL DISTANCES FROM SOURCE EQUAL TO OR GREATER THAN 75 METERS
 FOR ALL ANGLES EVALUATED (INDICATED BY < AT LEFT)
 UNDER THE FOLLOWING EAR PROTECTION CONDITIONS:

- MINIMUM QPL EAR MUFFS
- AMERICAN OPTICAL 1700 EAR MUFFS
- V-51R EAR PLUGS
- COMFIT TRIPLE FLANGE EAR PLUGS
- H-133 GROUND COMMUNICATION UNIT

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 100
 DISTANCE FROM SOURCE (METERS)

A N G L E I N D E R E S

(FIGURE: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)) IDENTIFICATION:)
 (9) EQUAL TIME CONTOURS (MINUTES))
 (NO PROTECTION) OMEGA 1.4
 () TEST 77-778-001)
 () RUN 04)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE) MILITARY POWER (100% RPM)) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE)) PAGE 7)



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(-----)
( FIGURE: MAXIMUM PERMISSIBLE TIME {T} FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73) ) IDENTIFICATION: )
(      9 ) ) )
( ) ) OMEGA 1.4 )
( ) ) TEST 77-778-001 )
( NOISE SOURCE/SUBJECT: ) OPERATION: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) MILITARY POWER (100% RPM) ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 8 )
(-----)
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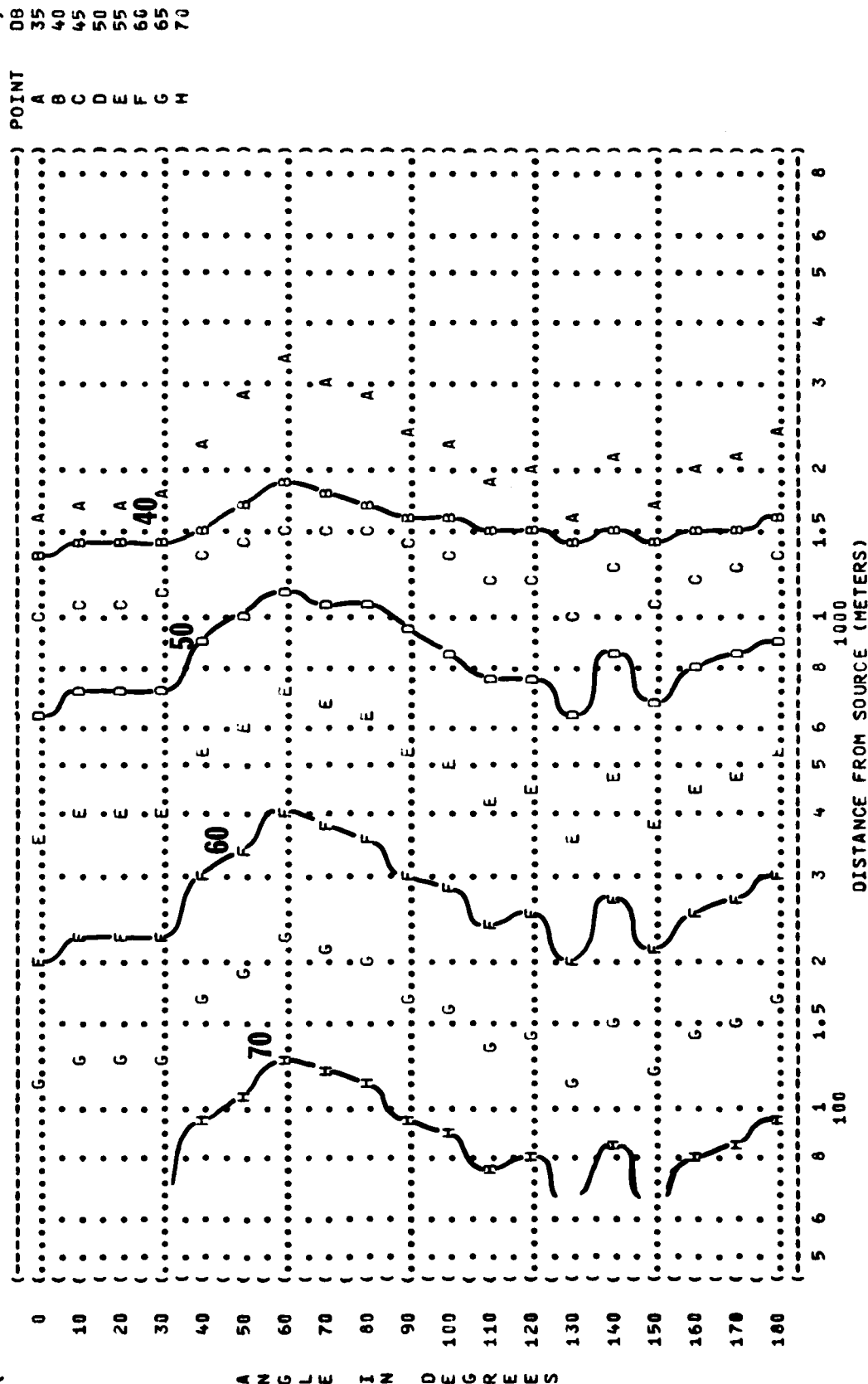
PERSONNEL MAY BE EXPOSED UP TO 960 MINUTES PER DAY
AT ALL DISTANCES FROM SOURCE EQUAL TO OR GREATER THAN 75 METERS
FOR ALL ANGLES EVALUATED (INDICATED BY < AT LEFT)
UNDER THE FOLLOWING EAR PROTECTION CONDITIONS:

MINIMUM OPL EAR MUFFS
AMERICAN OPTICAL 1700 EAR MUFFS
V-51R EAR PLUGS
COMFIT TRIPLE FLANGE EAR PLUGS
H-133 GROUND COMMUNICATION UNIT

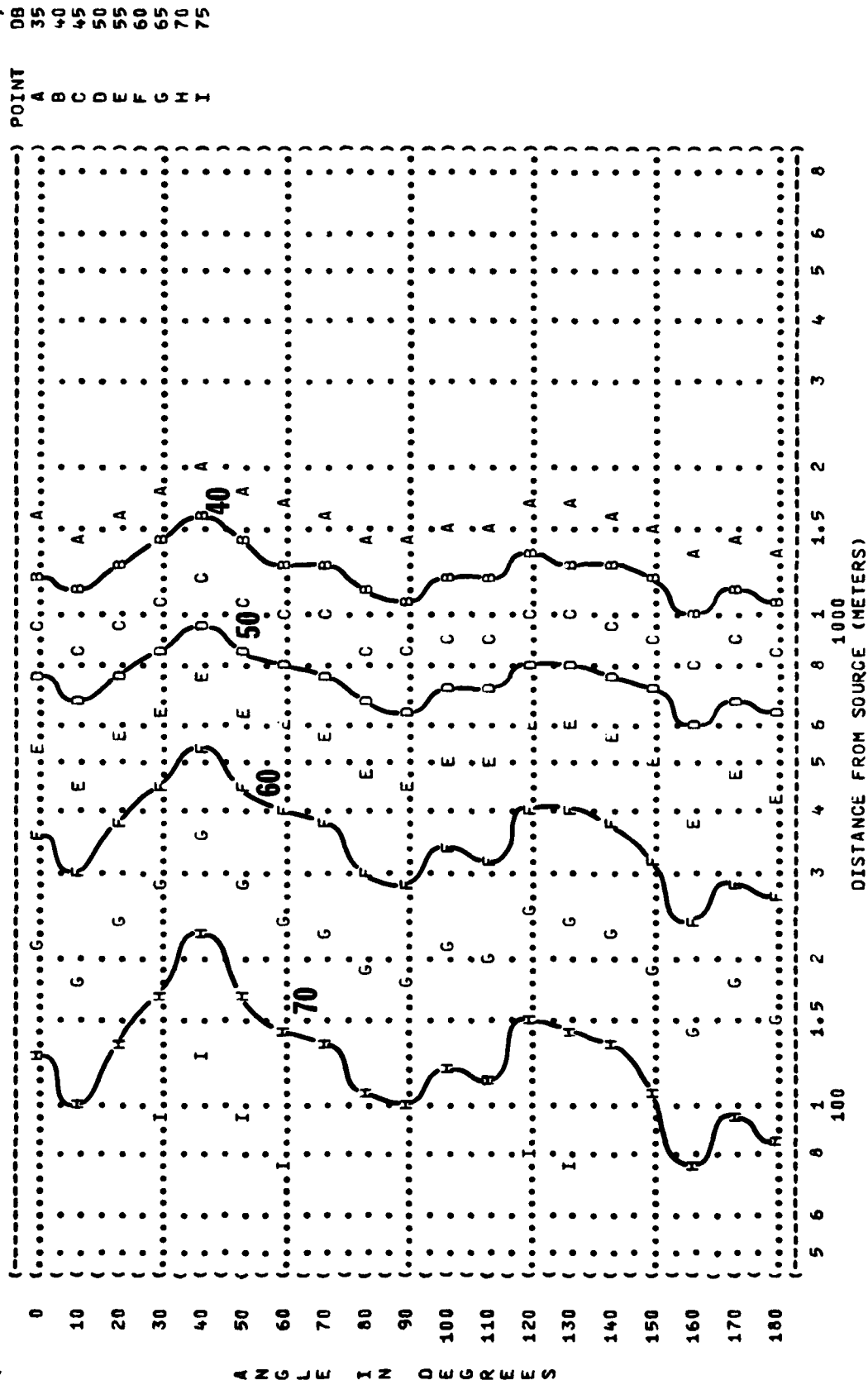
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DISTANCE FROM SOURCE (METERS)

FIGURE	MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)	IDENTIFICATION
9	9	OMEGA 1.4 TEST 77-778-001
<p>NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:) F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 % FAR FIELD NOISE () PAGE 8</p>		
<p>PERSONNEL MAY BE EXPOSED UP TO 960 MINUTES PER DAY AT ALL DISTANCES FROM SOURCE EQUAL TO OR GREATER THAN 75 METERS FOR ALL ANGLES EVALUATED (INDICATED BY < AT LEFT) UNDER THE FOLLOWING EAR PROTECTION CONDITIONS:</p>		
<p>MINIMUM QPL EAR MUFFS AMERICAN OPTICAL 1700 EAR MUFFS V-51R EAR PLUGS COMFIT TRIPLE FLANGE EAR PLUGS H-133 GROUND COMMUNICATION UNIT</p>		
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20<	1.5	2
30<	2	3
40<	3	4
50<	4	5
60<	5	6
70<	6	8
80<	8	100
90<	100	1000
100<	1000	10000
110<	10000	100000
120<	100000	1000000
130<	1000000	10000000
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170<	10000000000	100000000000
180<	100000000000	1000000000000

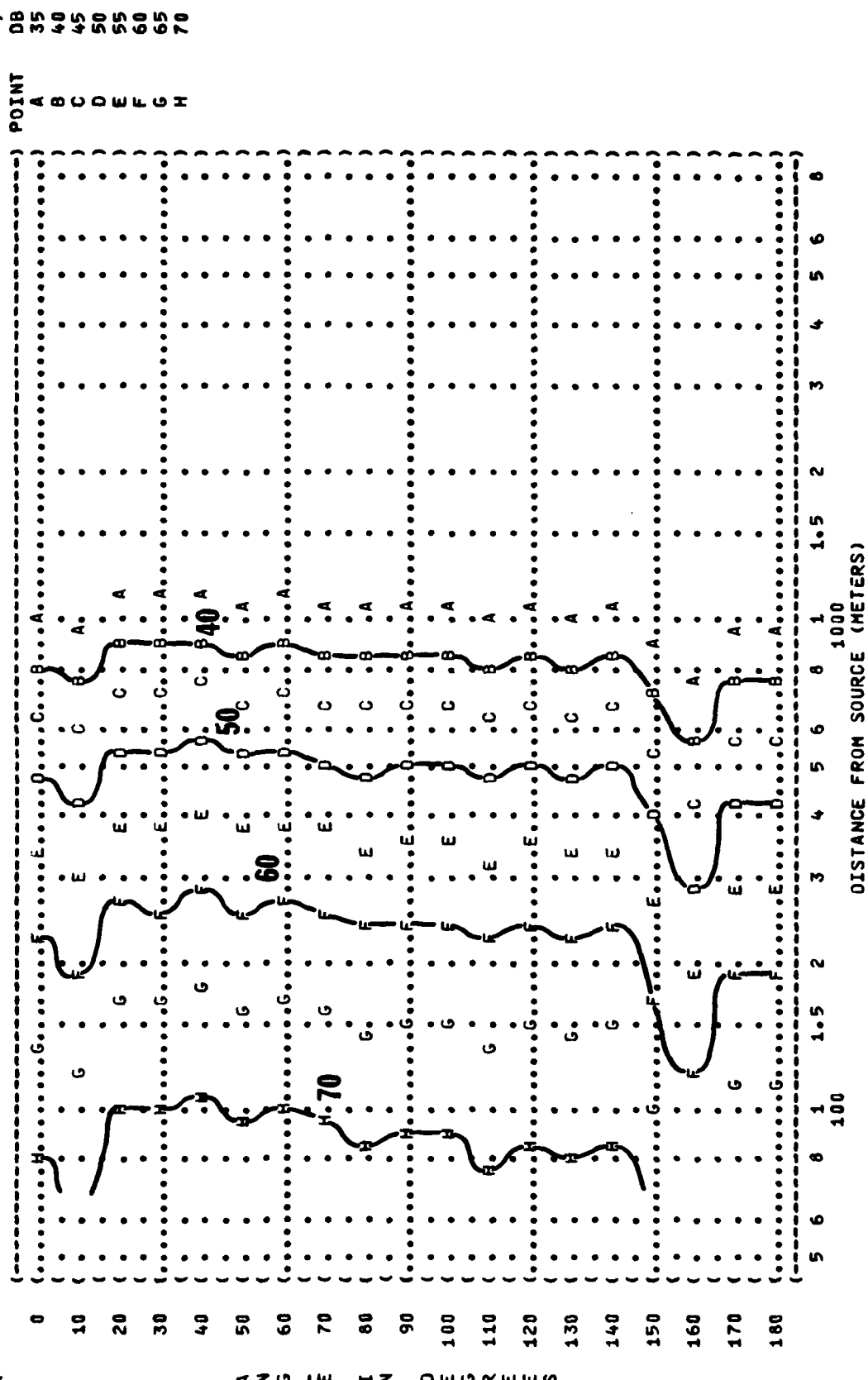
() FIGURE: SOUND PRESSURE LEVEL (SPL)
 () EQUAL LEVEL CONTOURS (DB)
 () **10** 31.5 HZ OCTAVE BAND
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 01
 () NOISE SOURCE/SUBJECT:
 () OPERATION:
 () F-106 AIRCRAFT IN THE
 () IDLE POWER (59% RPM)
 () AF32A-17 SUPPRESSOR
 () SINGLE ENGINE
 () ENGINE J75-P-17
 () GROUND RUNUP (SUPPRESSED)
 () REL HUMID = 70 %
 () FAR FIELD NOISE
 () PAGE 18



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (63 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT:
 (F-106 AIRCRAFT IN THE
 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATION:
 (IDLE POWER (59% RPM)
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 01
 (14 SEP 78
 (PAGE 19

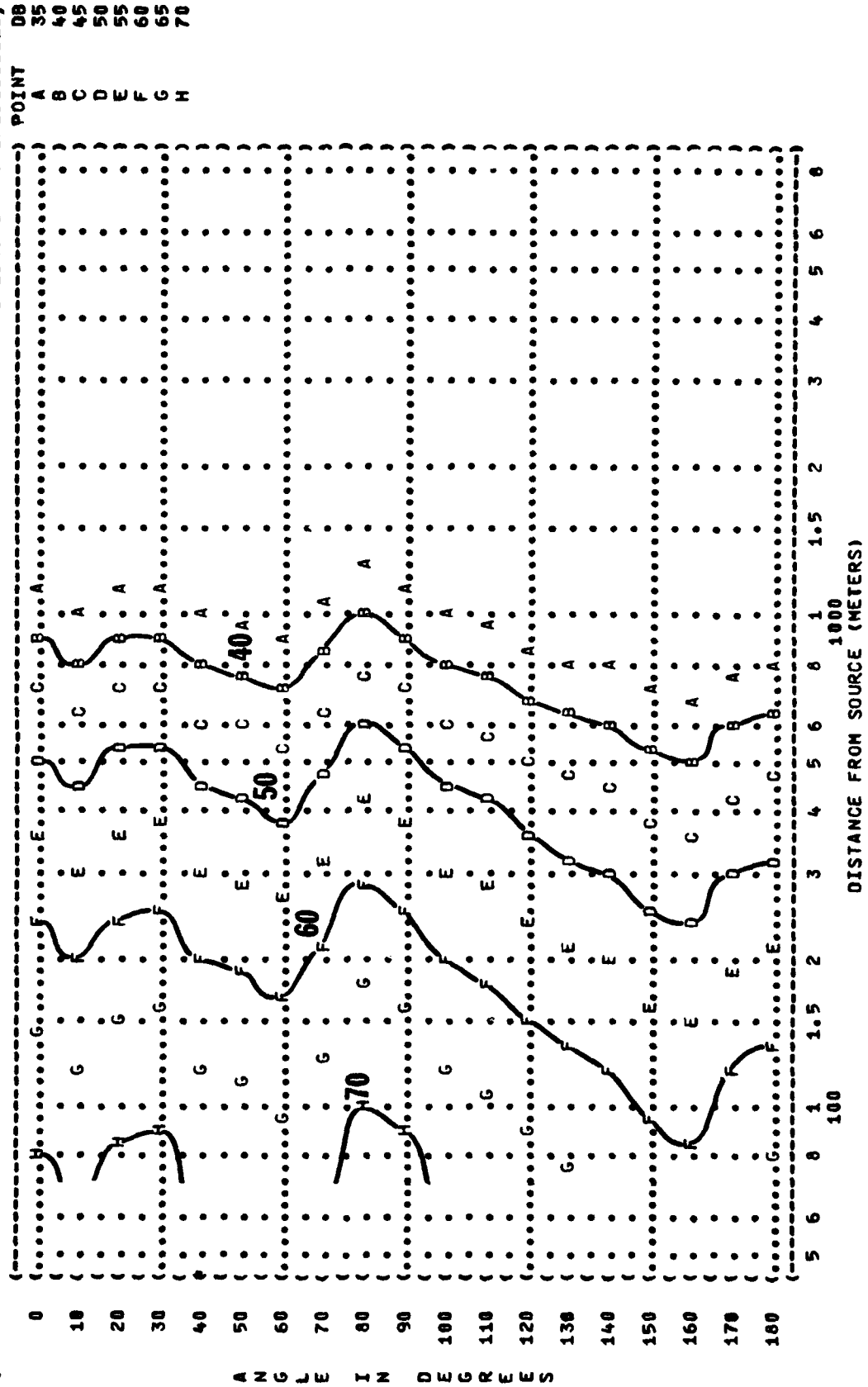


(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (125 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:
 (F-106 AIRCRAFT IN THE (IDLE POWER (59% RPM)) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 20)

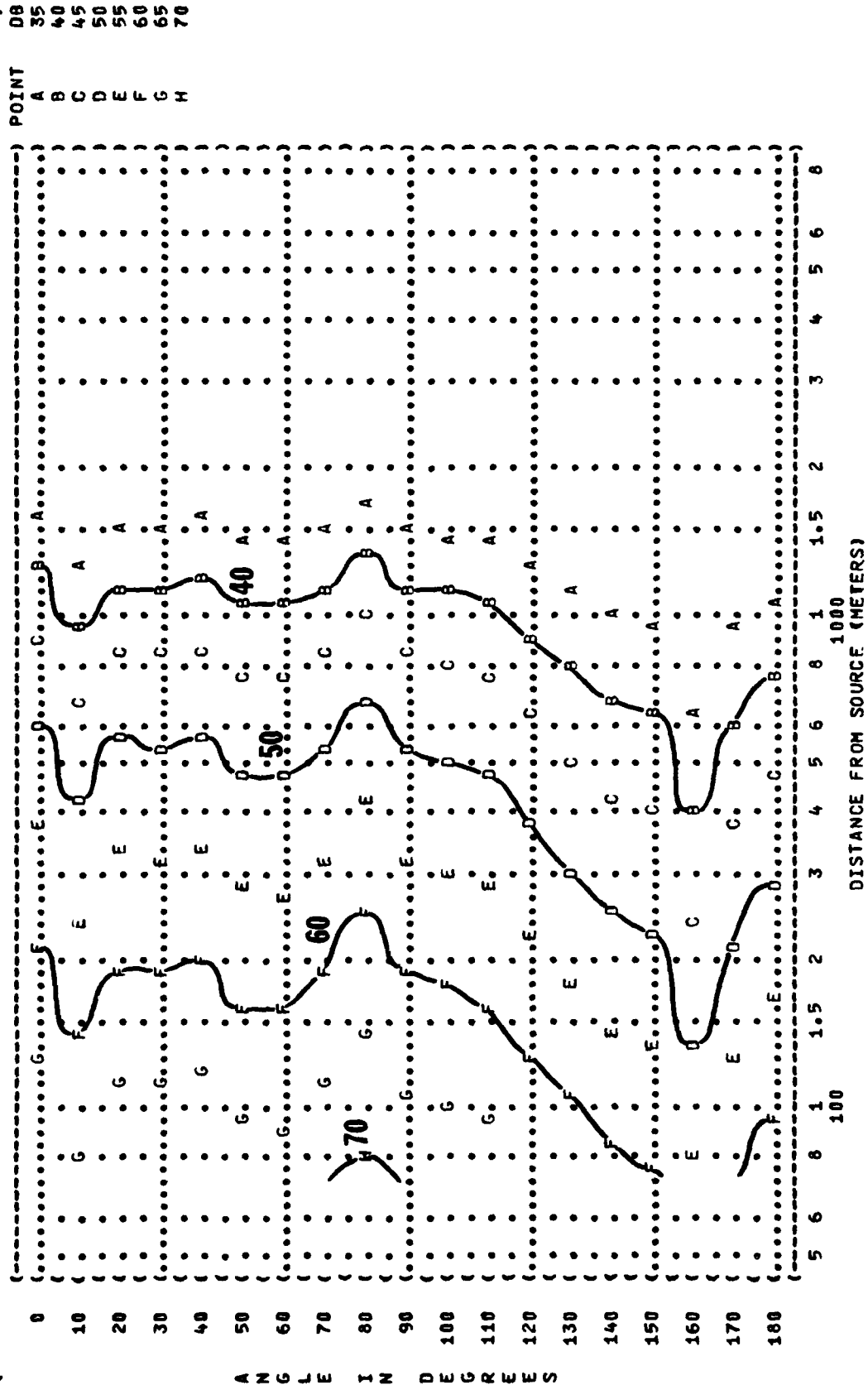


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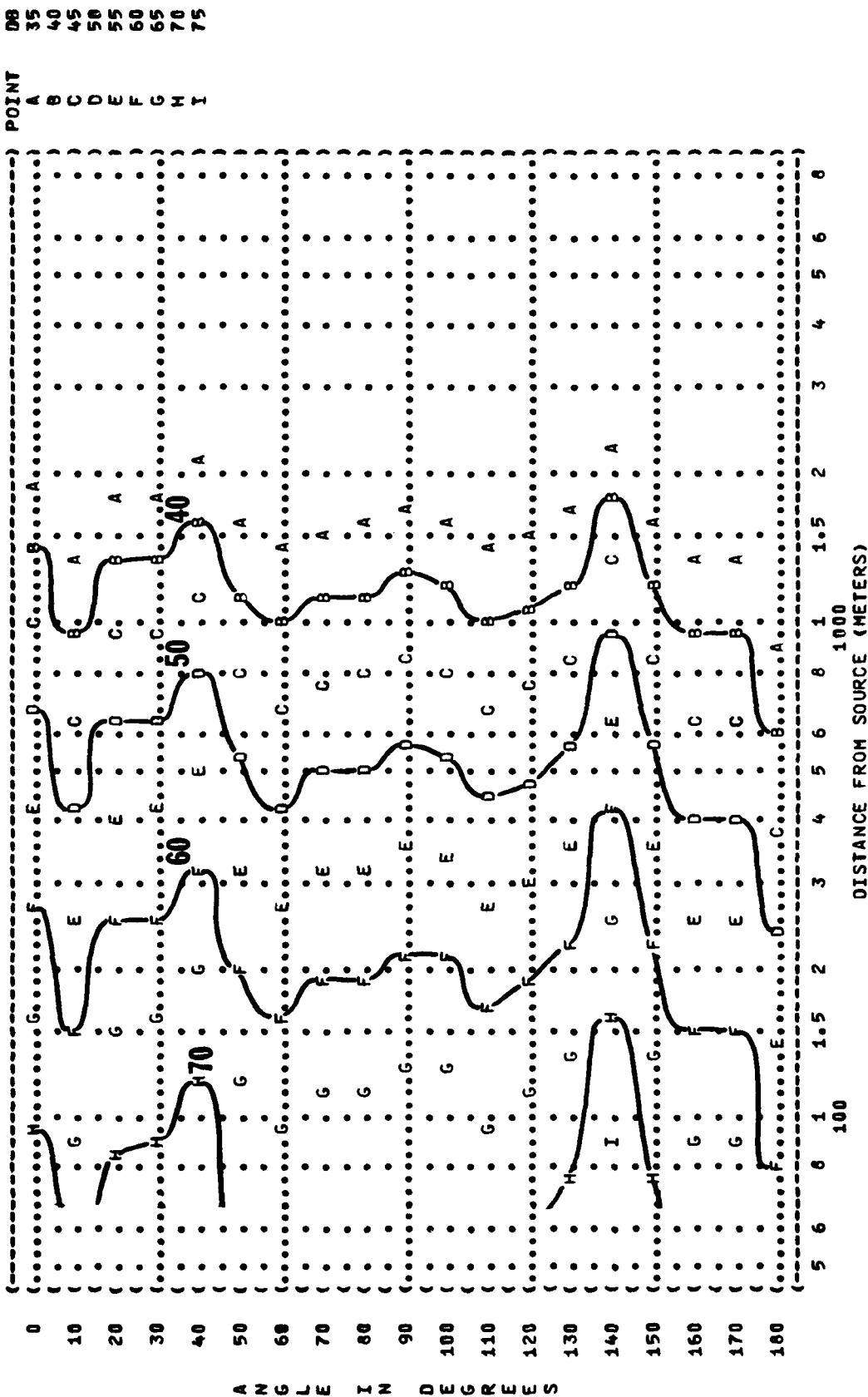
(FIGURE 1 SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (250 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (POINT DB
 (F-106 AIRCRAFT IN THE (IDLE POWER (59% RPM)) TEMP = 15 C) A 35
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG) B 40
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %) C 45
 (FAR FIELD NOISE ())) D 50
 ())) E 55
 ())) F 60
 ())) G 65
 ())) H 70



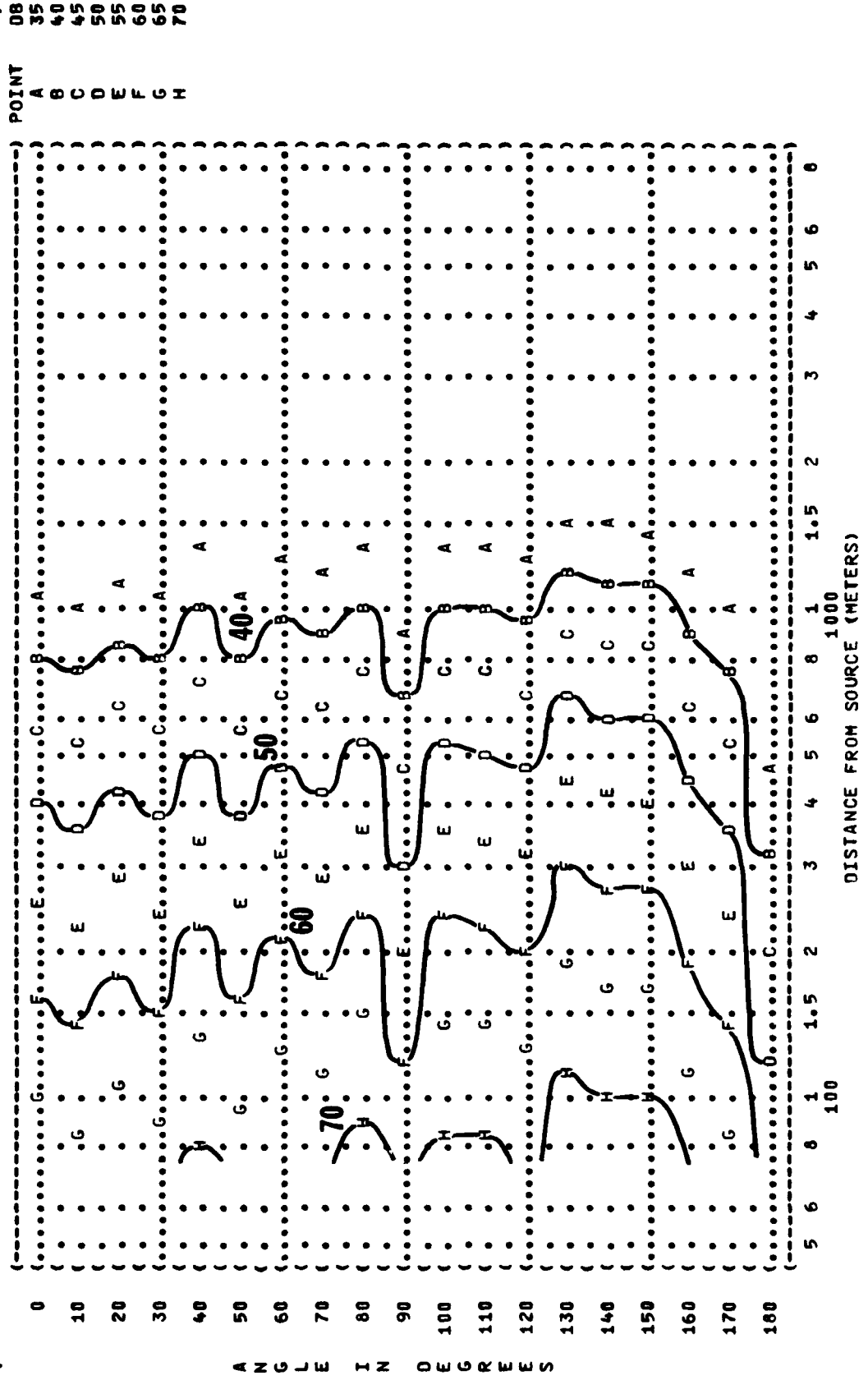
() FIGURE: SOUND PRESSURE LEVEL (SPL)
 () EQUAL LEVEL CONTOURS (DB)
 () 10 500 HZ OCTAVE BAND
 () NOISE SOURCE/SUBJECT:
 () F-106 AIRCRAFT IN THE
 () AF32A-17 SUPPRESSOR
 () ENGINE J75-P-17
 () FAR FIELD NOISE
 () OPERATION:
 () IDLE POWER (59% RPM)
 () SINGLE ENGINE
 () GROUND RUNUP (SUPPRESSED)
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 01
 () 24 JAN 79
 () PAGE 22



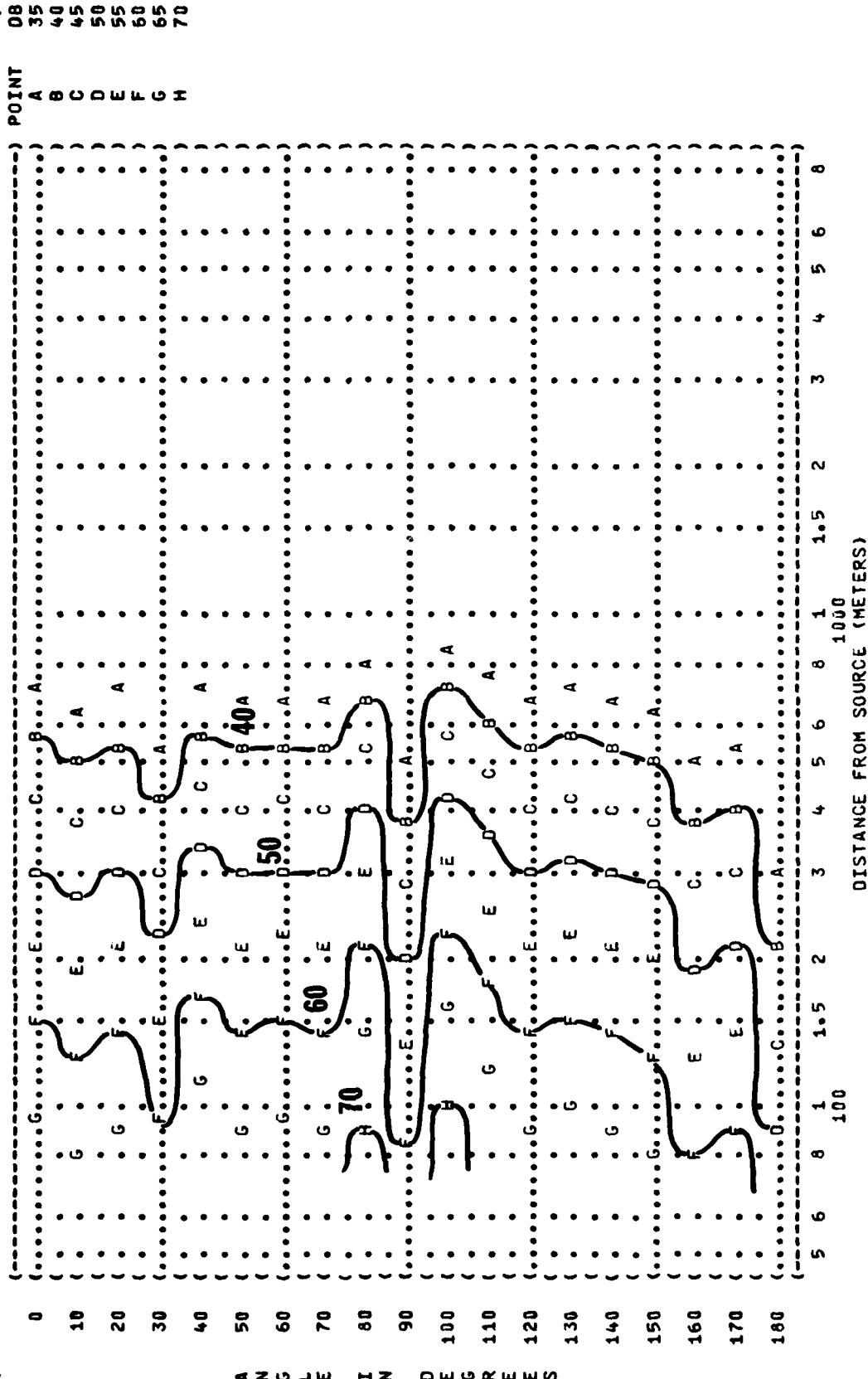
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 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE ()) PAGE 23
 () IDENTIFICATION:)
 () OMEGA 1.4
 () TEST 77-776-001
 () RUN 01
 () 24 JAN 79
 ()



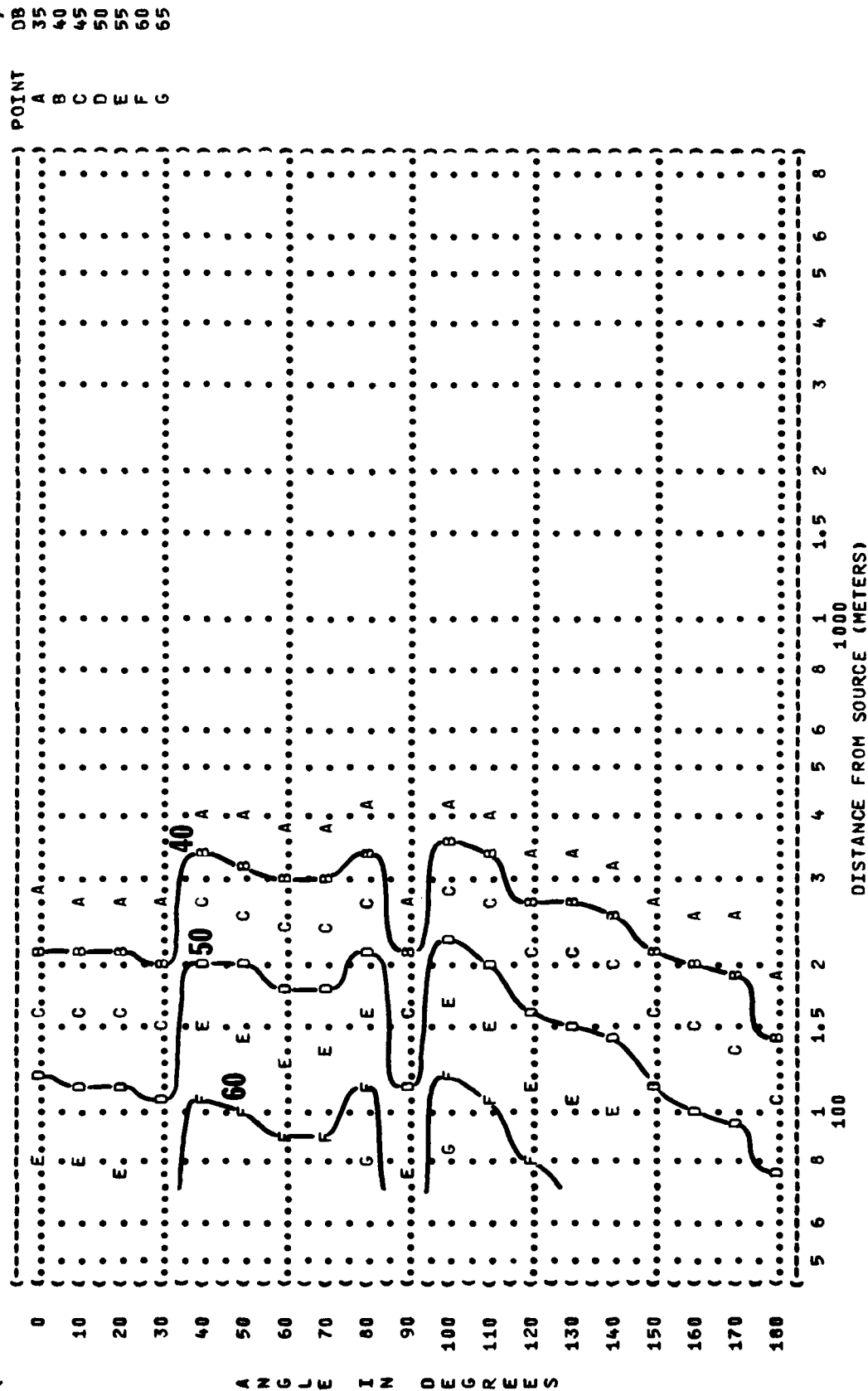
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 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATION:
 (IDLE POWER (59% RPM)
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 01
 (24 JAN 79
 (PAGE 24



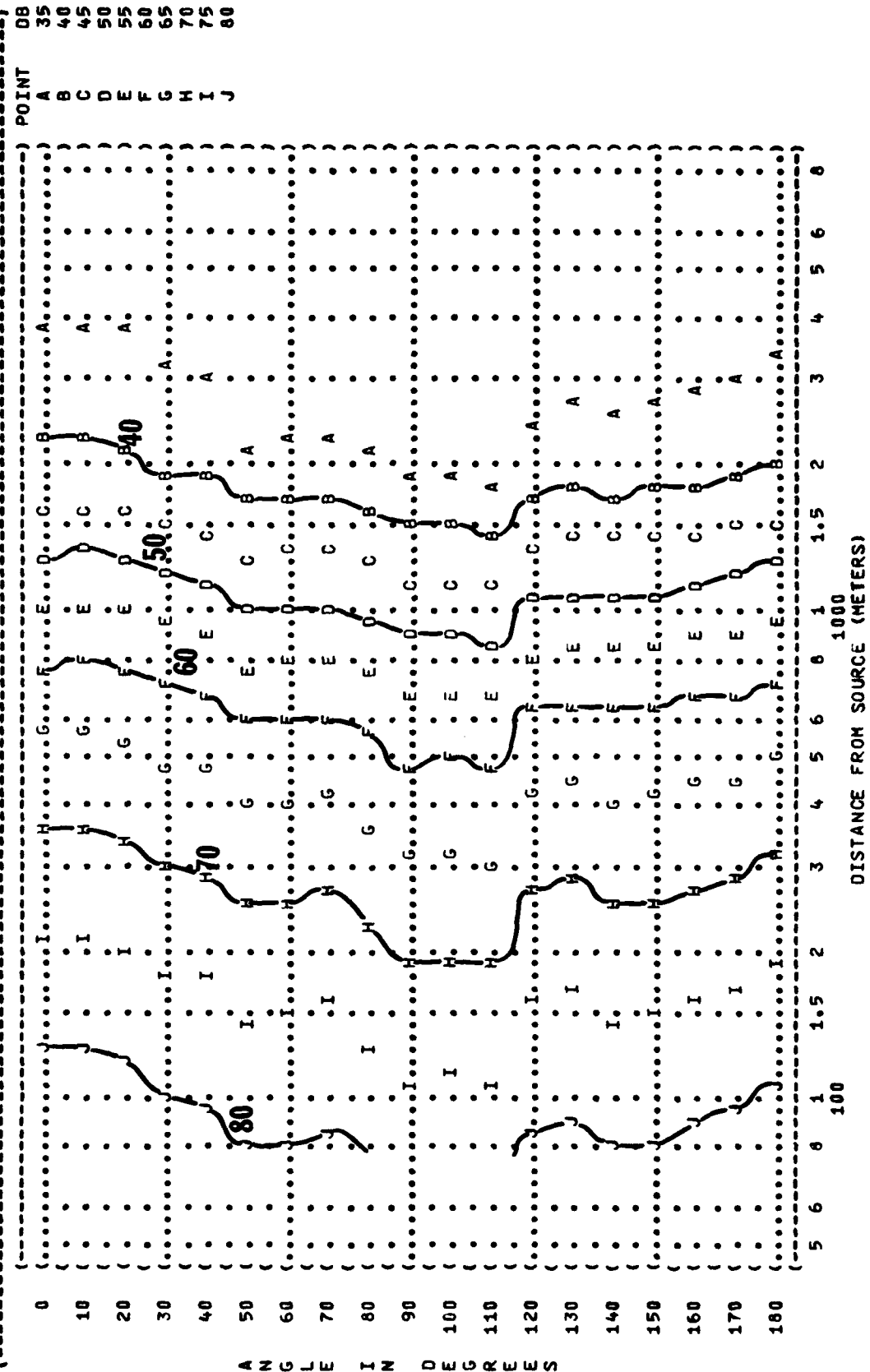
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( EQUAL LEVEL CONTOURS (DB) ) )
( 10 ) OMEGA 1.4 )
( 4000 HZ OCTAVE BAND ) TEST 77-770-001 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) IDLE POWER (59% RPM) ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 25 )
(-----)
```



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (8000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:
 (F-106 AIRCRAFT IN THE (IDLE POWER (59% RPM)) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 26)

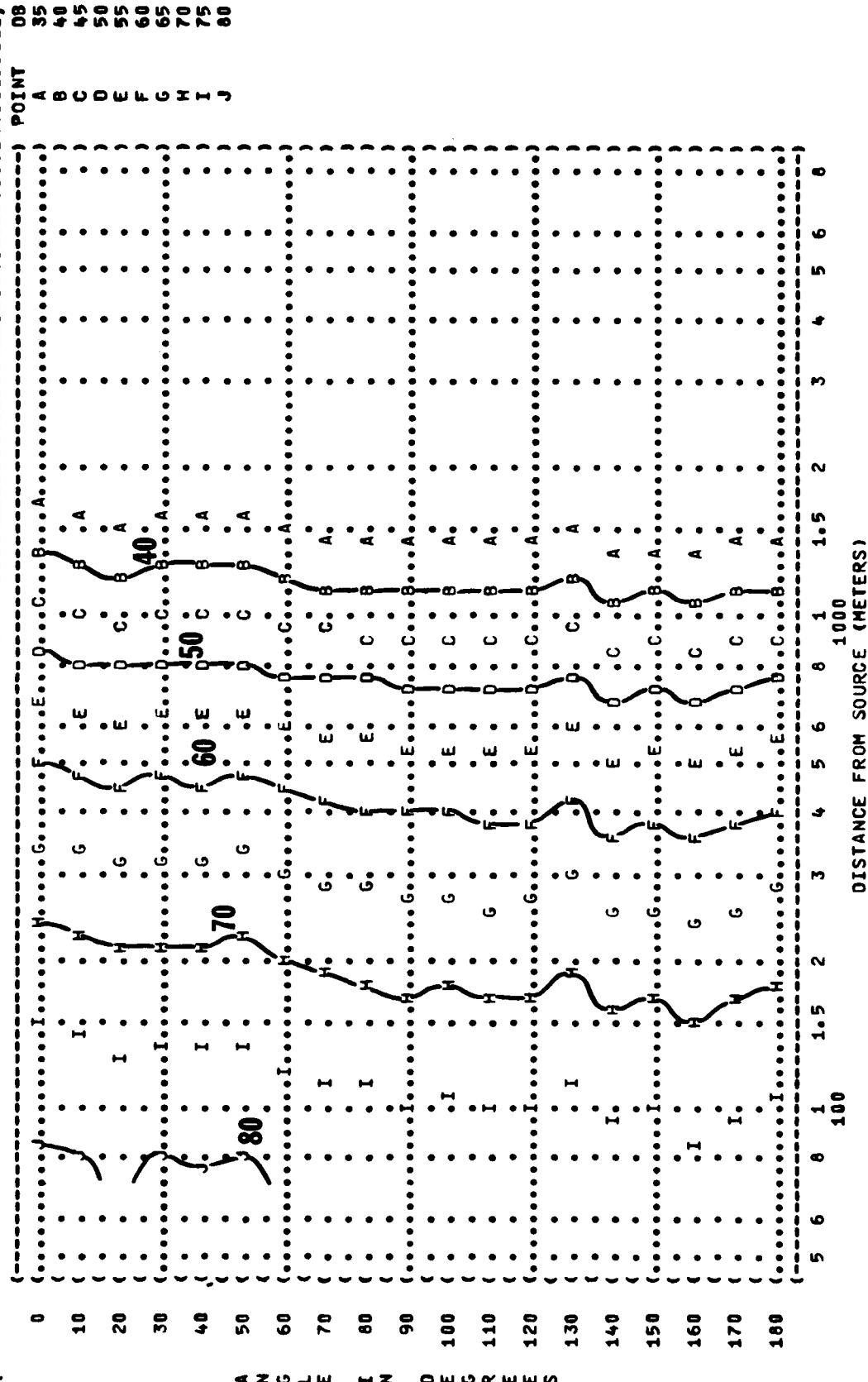


(FIGURE 1 SOUND PRESSURE LEVEL (SPL)
 (EQUAL LEVEL CONTOURS (DB)
 (10 63 HZ OCTAVE BAND
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 02
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (85% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (PAGE 19
 (METEOROLOGY:
 (TEMP = 15 C
 (14 SEP 78
 (

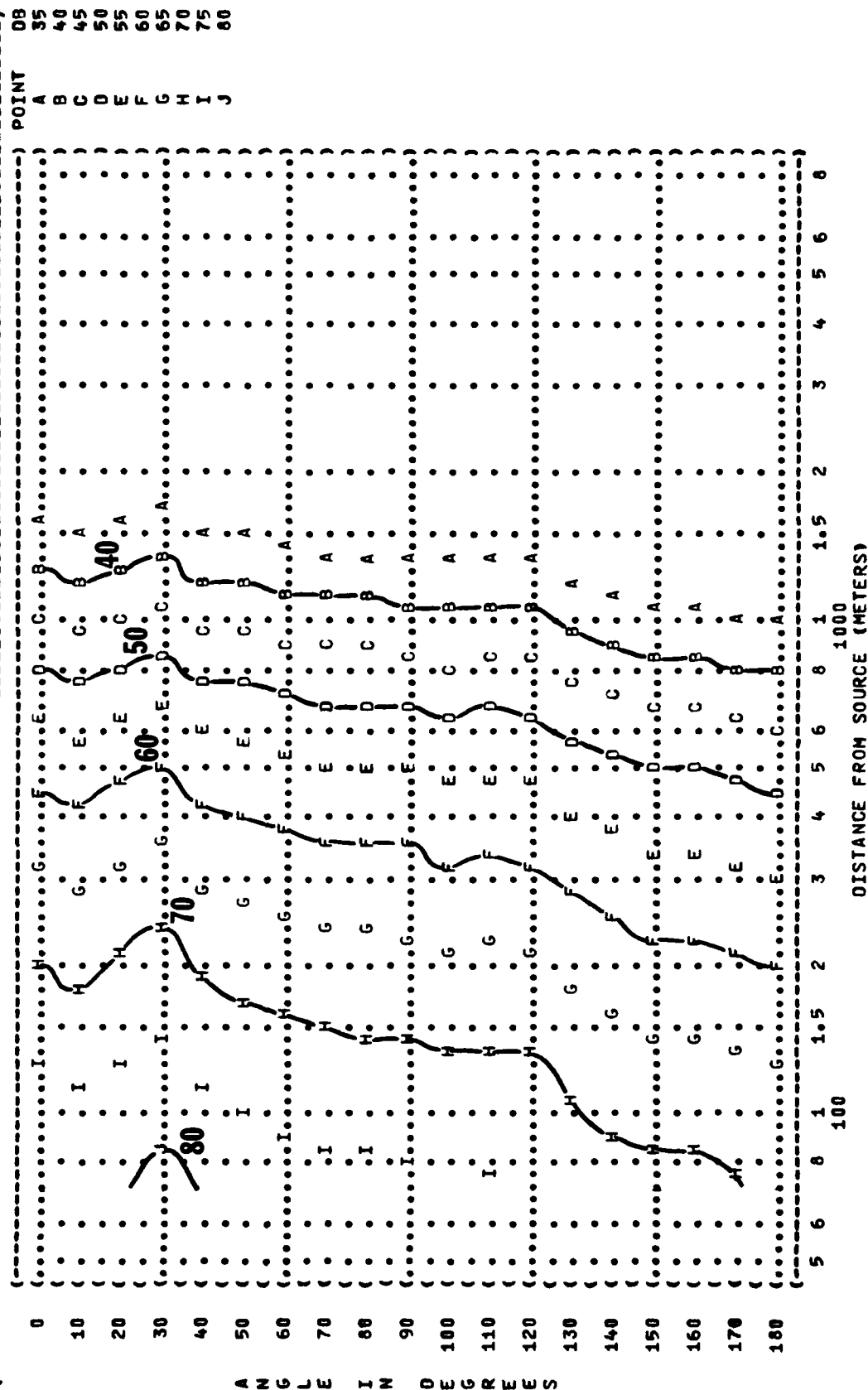


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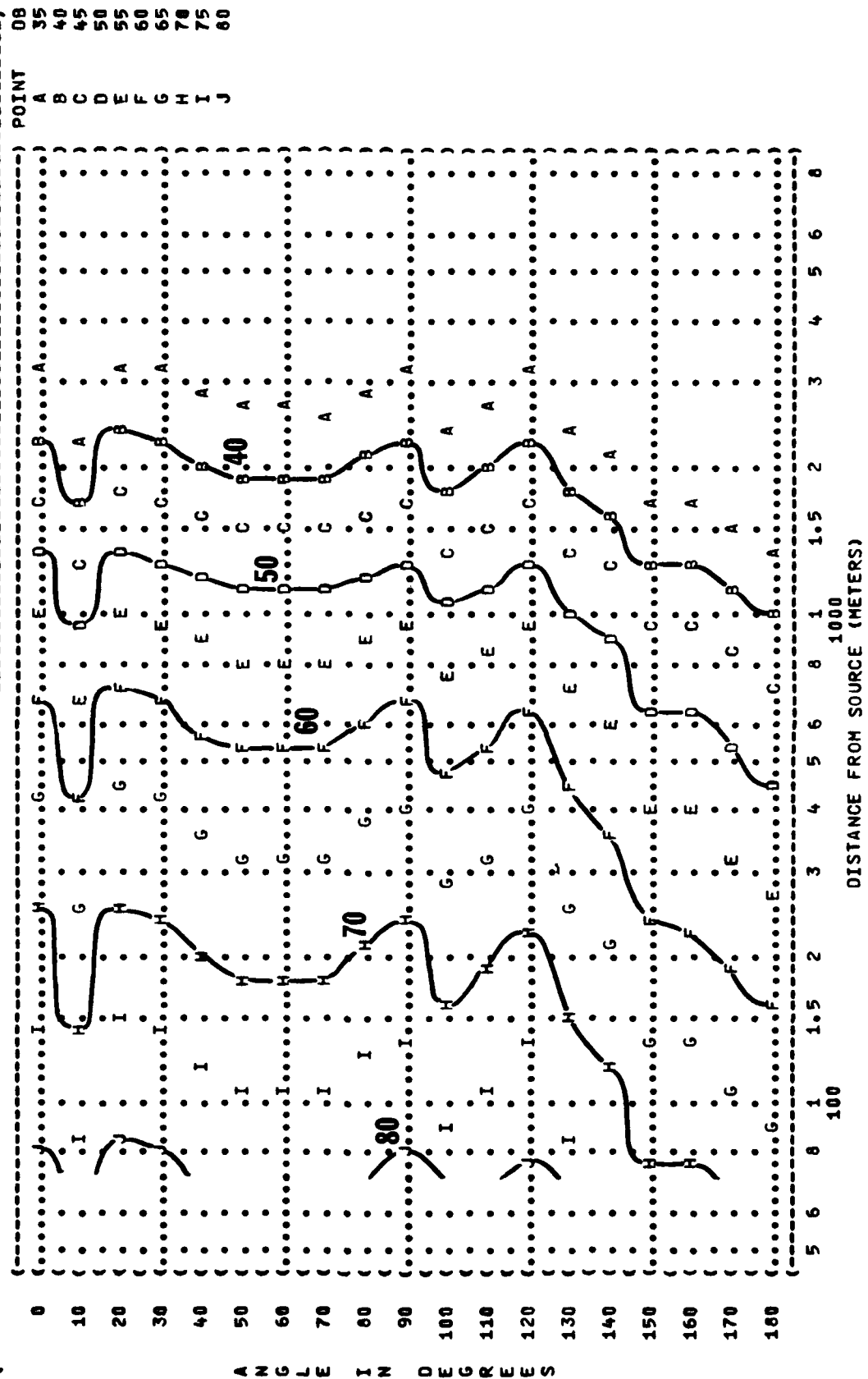
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 (10 EQUAL LEVEL CONTOURS (DB)
 (125 HZ OCTAVE BAND
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 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () METEOROLOGY:
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () PAGE 20
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-776-001
 () RUN 02
 () 24 JAN 79




```
(-----)
( FIGURE: SOUND PRESSURE LEVEL (SPL) ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) )
( 10 ) OMEGA 1.4 )
( 250 HZ OCTAVE BAND ) TEST 77-778-001 )
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( F-106 AIRCRAFT IN THE ) TEMP = 15 C )
( AF32A-17 SUPPRESSOR ) SINGLE ENGINE ) BAR PRESS = .760 M HG )
( ENGINE J75-P-17 ) GROUND RUNUP (SUPPRESSED) ) REL HUMID = 70 % )
( FAR FIELD NOISE ) ) PAGE 21 )
(-----)
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(FIGURE: SOUND PRESSURE LEVEL (SPL))
 (10 EQUAL LEVEL CONTOURS (DB))
 (500 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
 (F-106 AIRCRAFT IN THE)
 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (85% RPM)
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 (IDENTIFICATION:)
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 02)
 (24 JAN 79)
 (PAGE 22)



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(-----)
( ( FIGURE: SOUND PRESSURE LEVEL {SPL} ) ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) ) )
( ( 10 ) )
( ( 1000 HZ OCTAVE BAND ) )
(-----)
( ( NOISE SOURCE/SUBJECT: ) ) OPERATION: ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) ) ( 85% RPM ) ) TEMP = 15 C )
( ( AF32A-17 SUPPRESSOR ) ) ( SINGLE ENGINE ) ) BAR PRESS = .760 M HG )
( ( ENGINE J75-P-17 ) ) ( GROUND RUNUP (SUPPRESSED) ) ) REL HUMID = 70 % )
( ( FAR FIELD NOISE ) ) ) ) )
(-----)

```

00 35
40 45
50 55
60 65
70 75
80

POINT
A B C D E F G H I J

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180

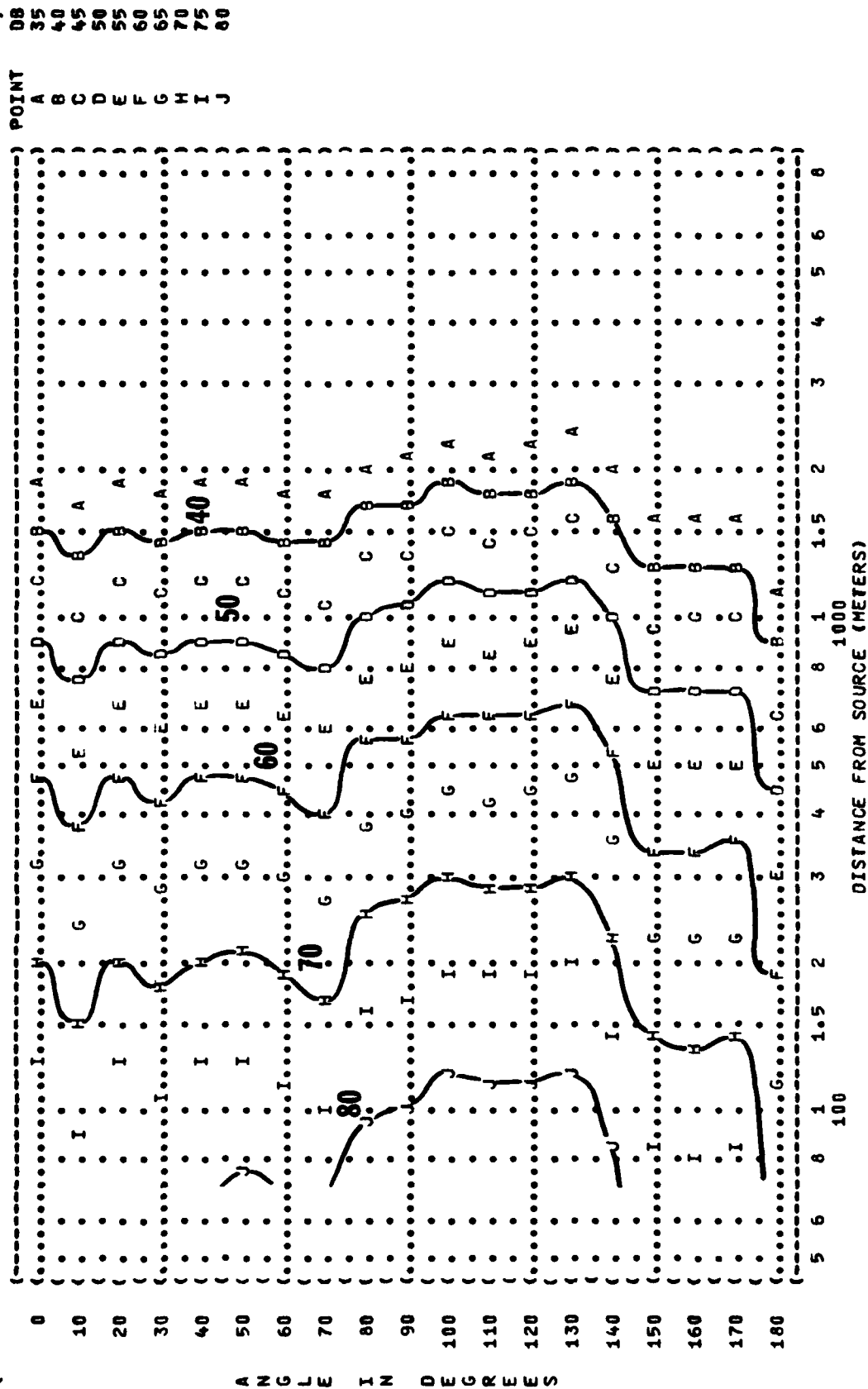
A N S L E I N D E G G R E E S

5 6 8 1 1.5 2 3 4 5 6 8 1 1.5 2 3 4 5 6 8

DISTANCE FROM SOURCE (METERS)

ANGLE IN DEGREES

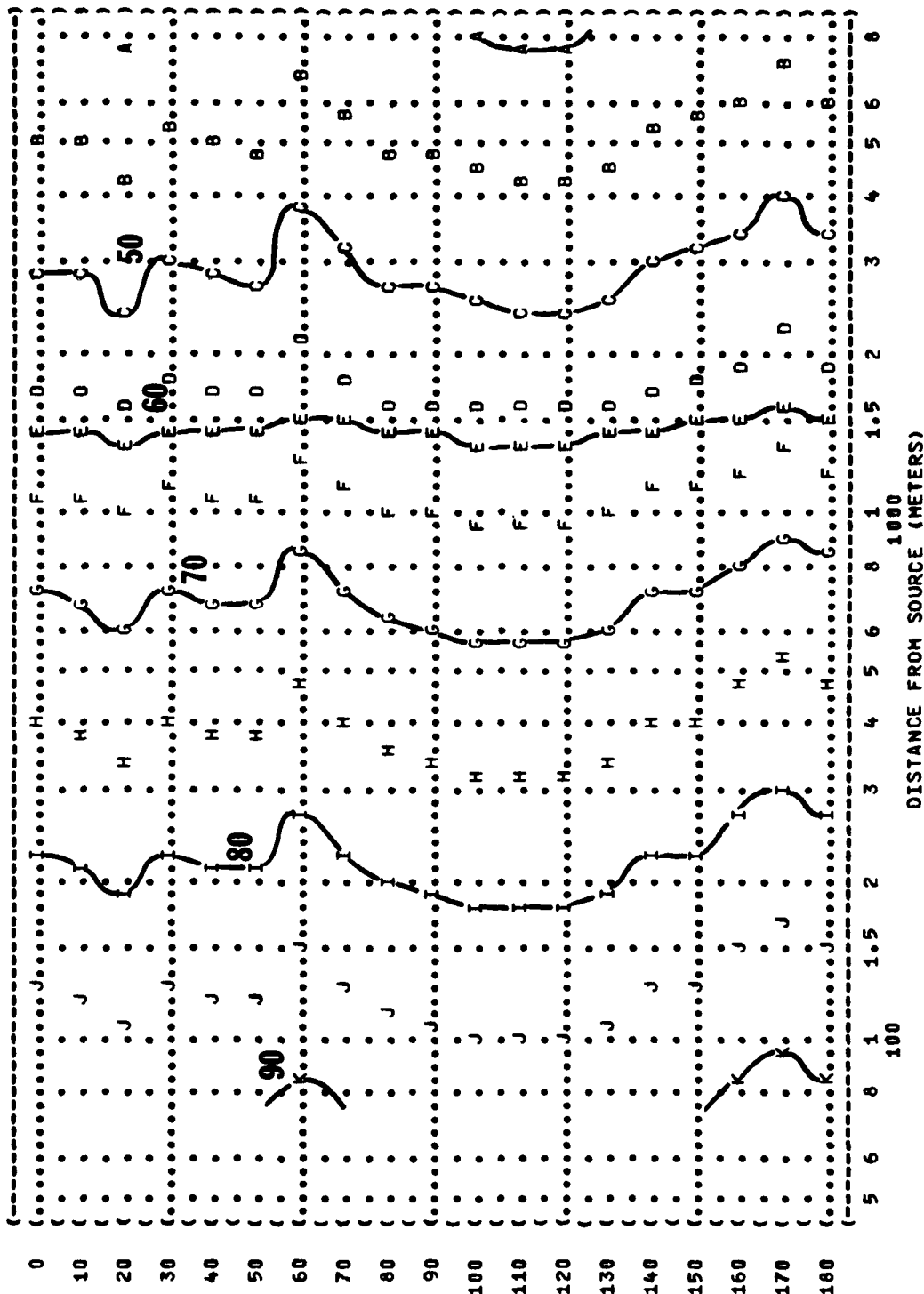
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 (10 EQUAL LEVEL CONTOURS (DB)
 (2000 HZ OCTAVE BAND
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 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () IDENTIFICATION:
 () OMEGA 1.4
 (TEST 77-778-001
 (RUN 02
 () 24 JAN 79
 () PAGE 24



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (31.5 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (95% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE (

) IDENTIFICATION:
) OMEGA 1.4
) TEST 77-778-001
) RUN 03
) 24 JAN 79
) PAGE 18
) METEOROLOGY:
) TEMP = 15 C
) BAR PRESS = .760 M HG
) REL HUMID = 70 %
) POINT DB
) A 40
) B 45
) C 50
) D 55
) E 60
) F 65
) G 70
) H 75
) I 80
) J 85
) K 90

A N G
 L E
 I N
 D E G
 R E E S

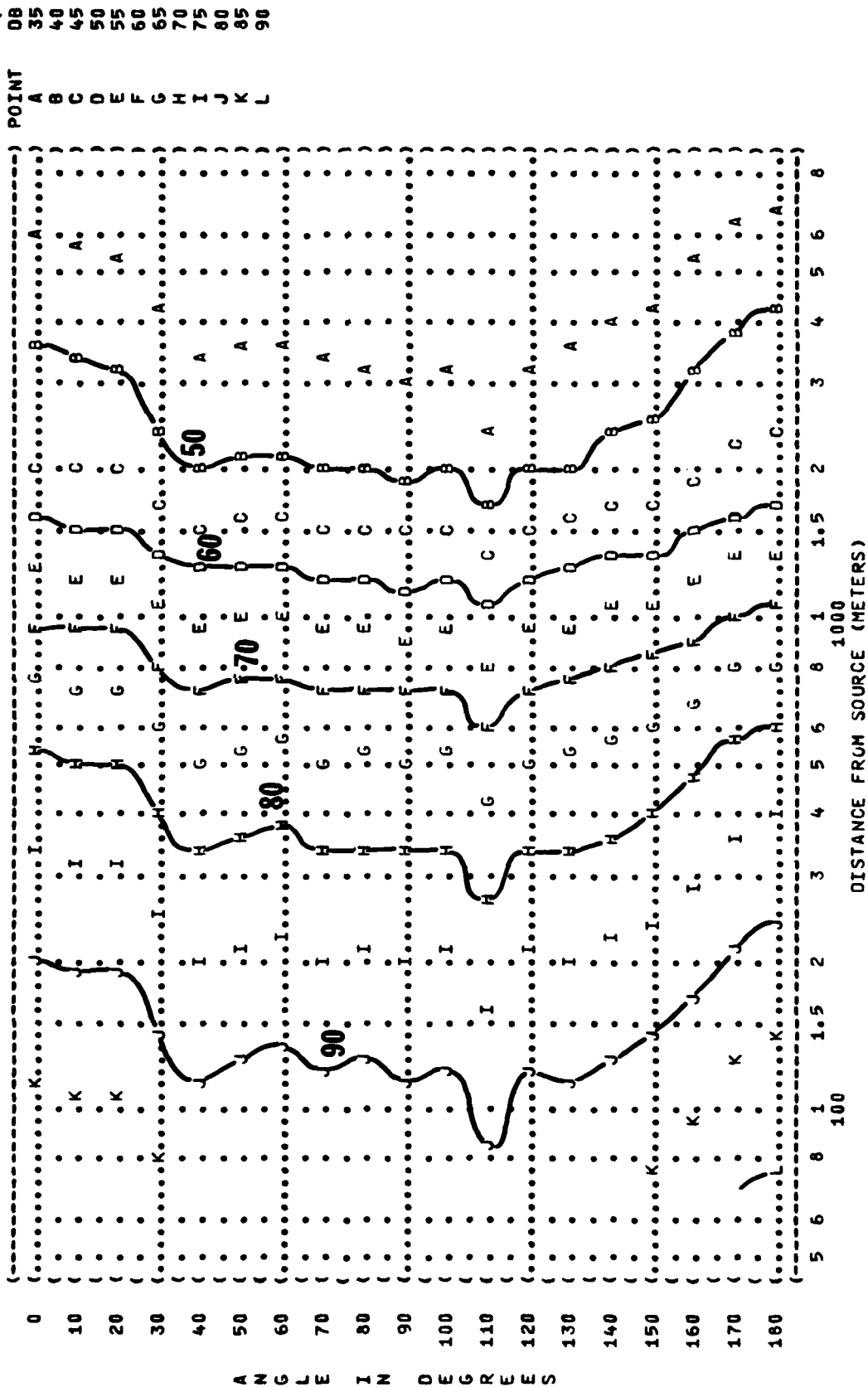


DISTANCE FROM SOURCE (METERS)

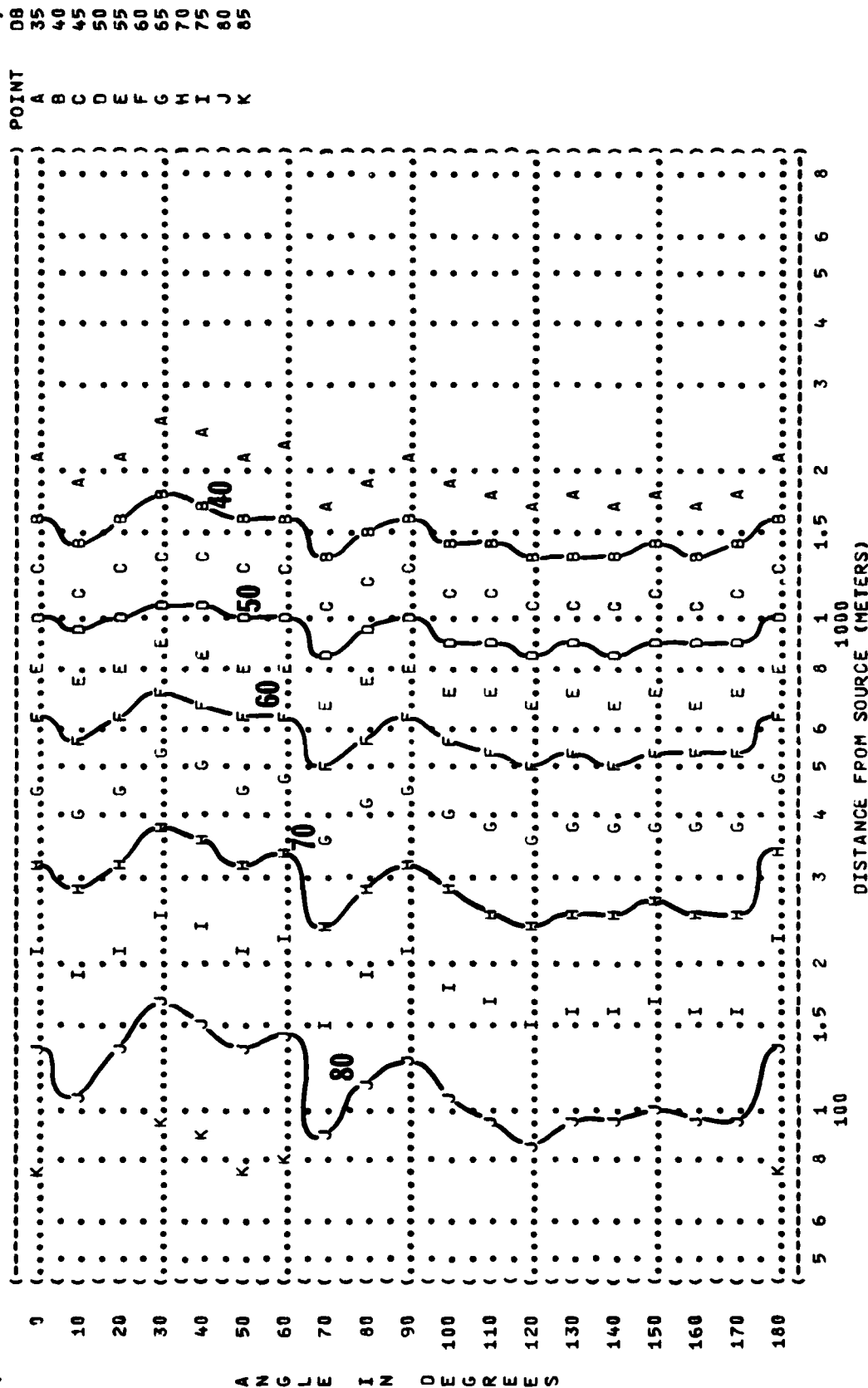
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( ( FIGURE: SOUND PRESSURE LEVEL (SPL) ) IDENTIFICATION: )
( ( 10 EQUAL LEVEL CONTOURS (DB) ) )
( ( 63 HZ OCTAVE BAND ) )
( ( NOISE SOURCE/SUBJECT: ) )
( ( F-106 AIRCRAFT IN THE ) )
( ( AF32A-17 SUPPRESSOR ) )
( ( ENGINE J75-P-17 ) )
( ( FAR FIELD NOISE ) )
( ( OPERATION: ) )
( ( 95% RPM ) )
( ( SINGLE ENGINE ) )
( ( GROUND RUNUP (SUPPRESSED) ) )
( ( METEOROLOGY: ) )
( ( TEMP = 15 C ) )
( ( BAR PRESS = .760 M HG ) )
( ( REL HUMID = 70 % ) )
( ( RUN 03 ) )
( ( OMEGA 1.4 ) )
( ( TEST 77-778-001 ) )
( ( PAGE 19 ) )

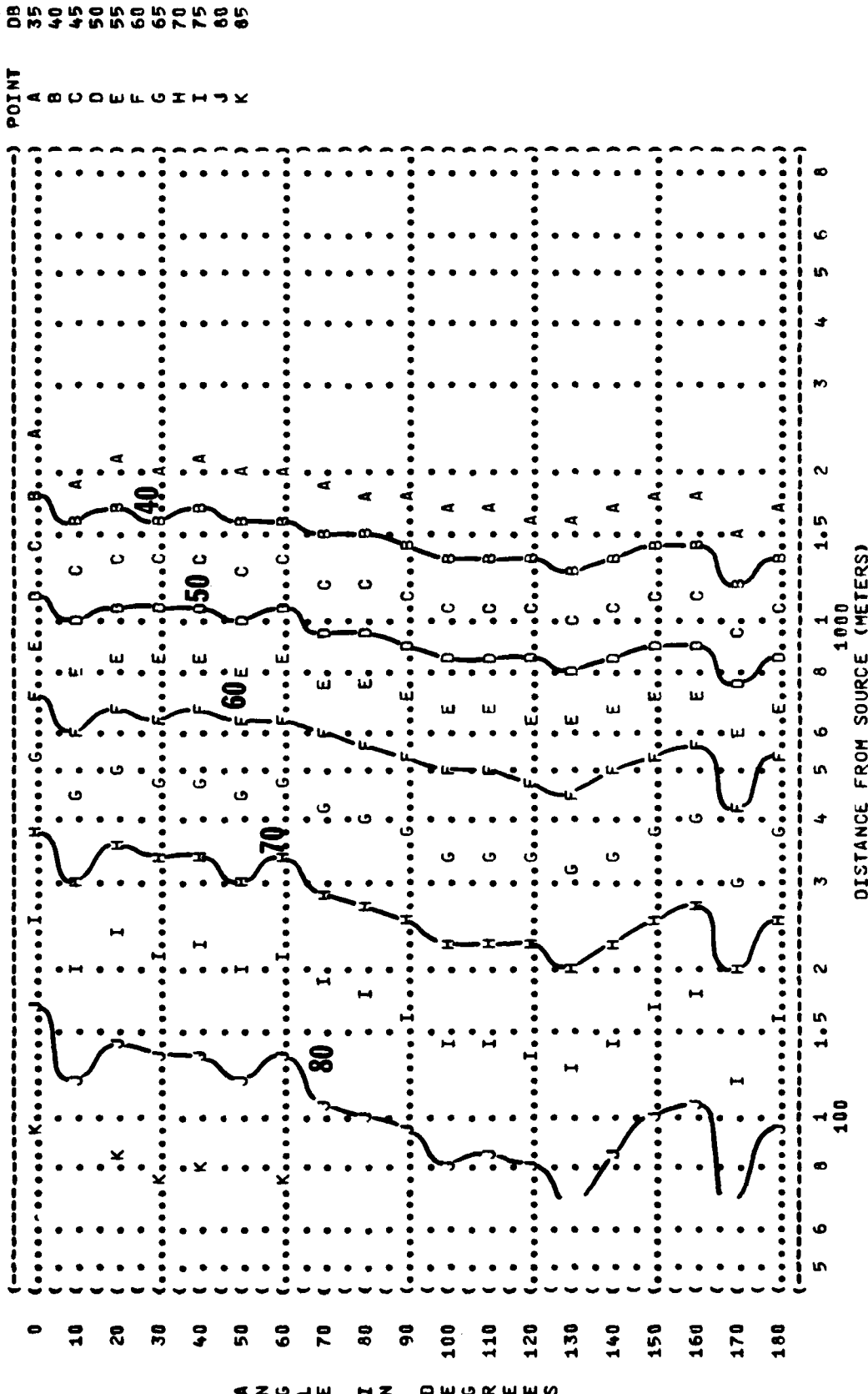
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(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (125 HZ OCTAVE BAND
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 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 03
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () REL HUMID = 70 %
 () PAGE 20



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (250 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT:
 (F-106 AIRCRAFT IN THE
 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATIONS:
 (95% RPM
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 03
 (24 JAN 79
 (PAGE 21



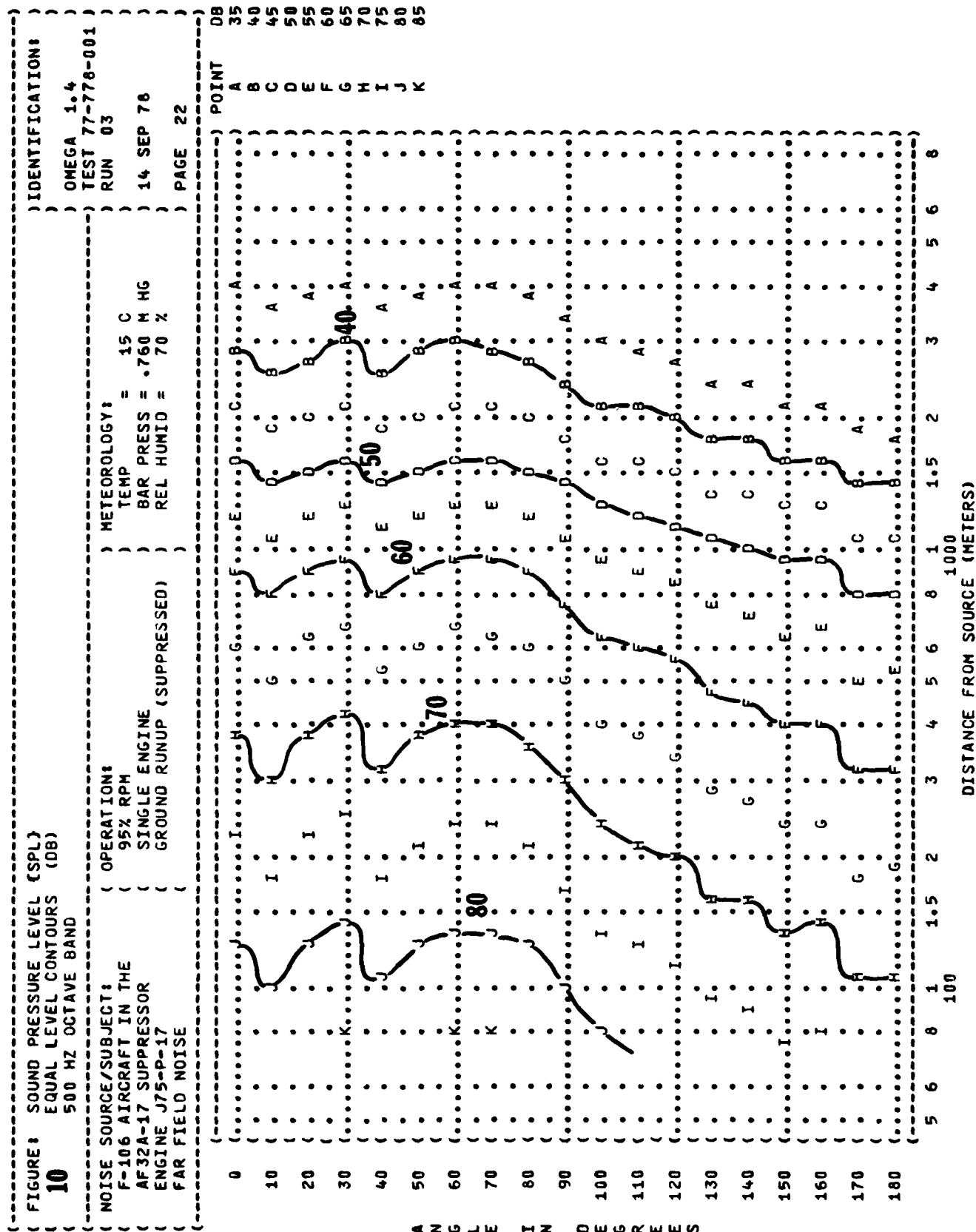
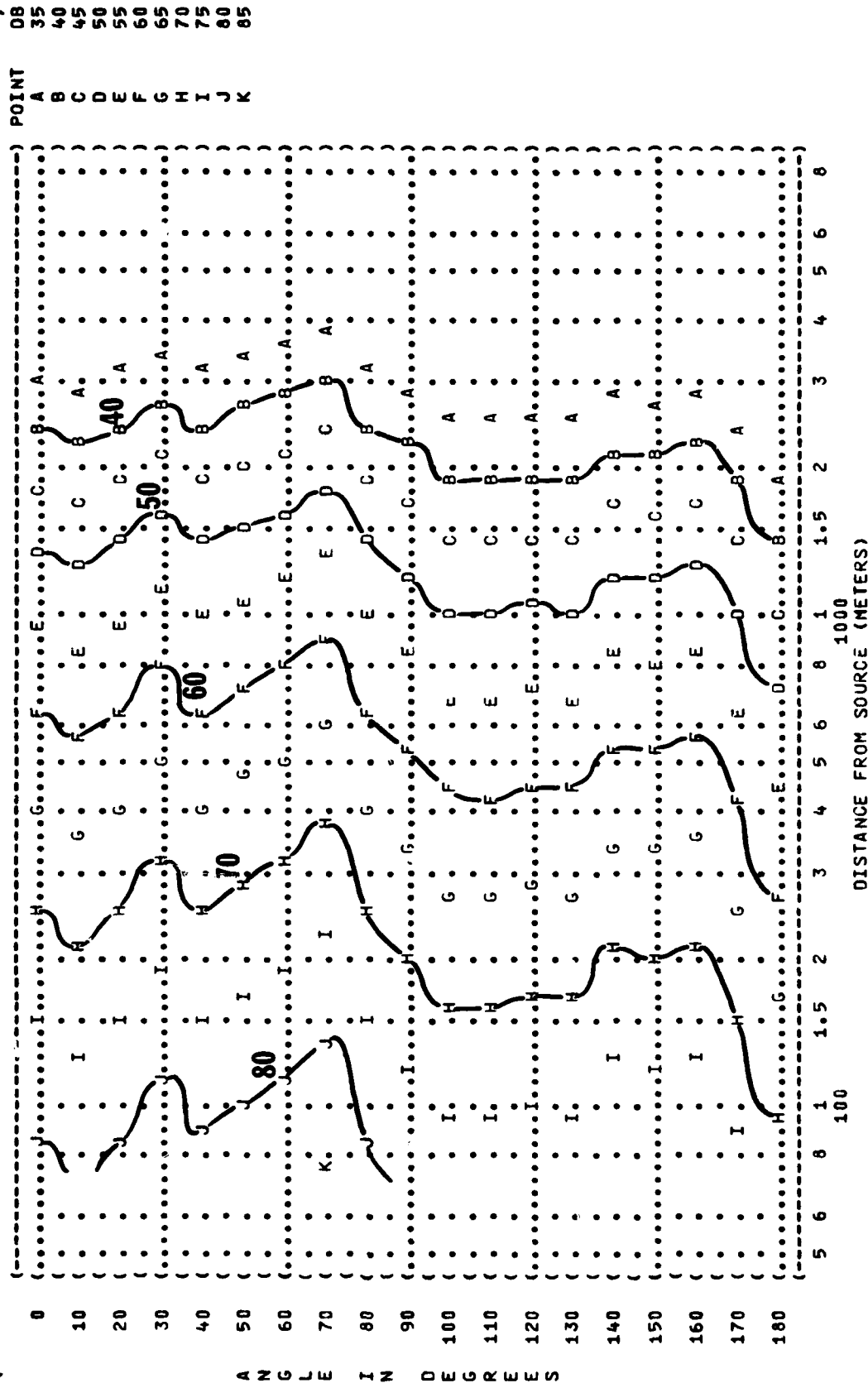


FIGURE 10 SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

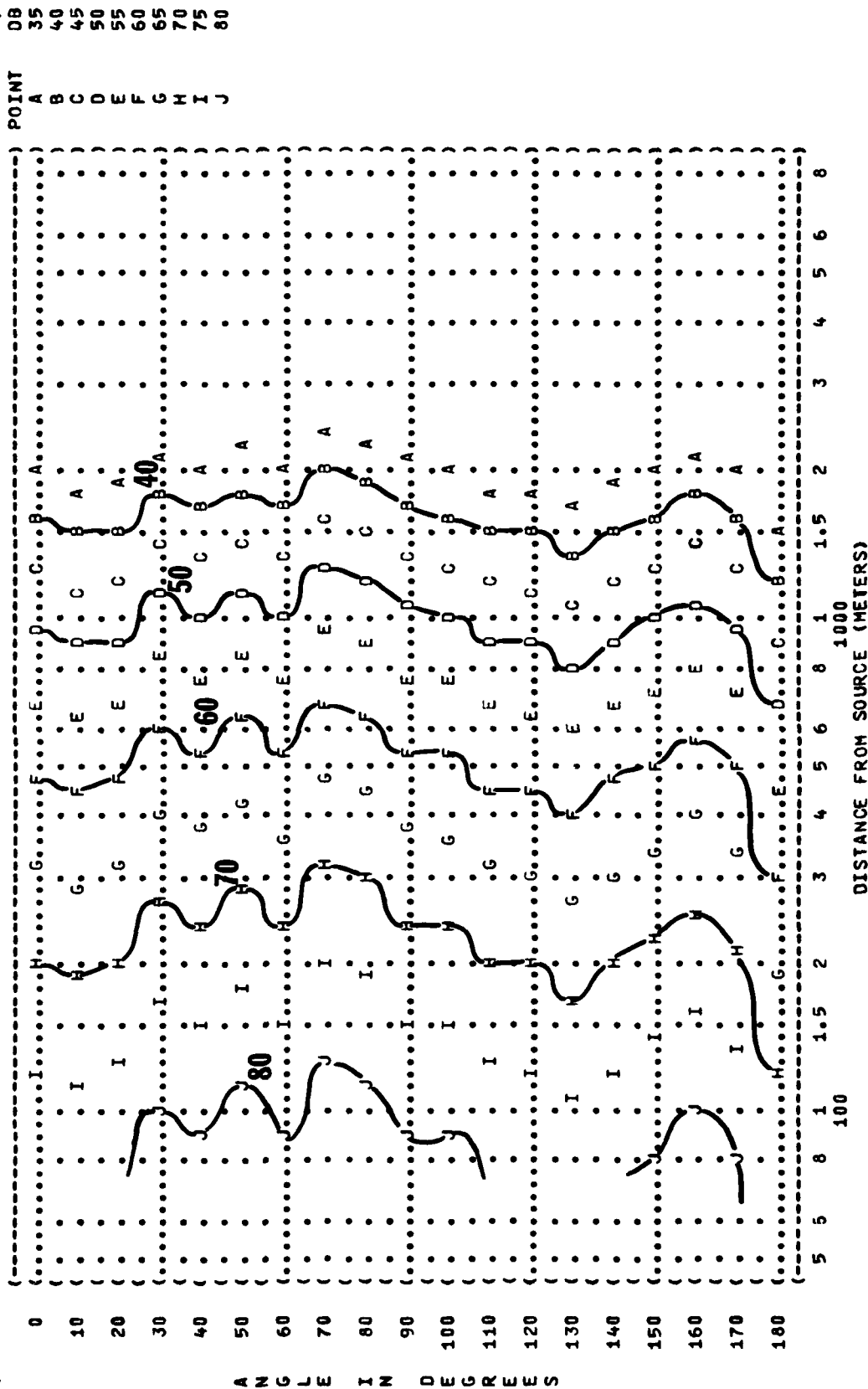
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OMEGA 1.4
TEST 77-770-001
RUN 03
METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %
OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)
FAR FIELD NOISE



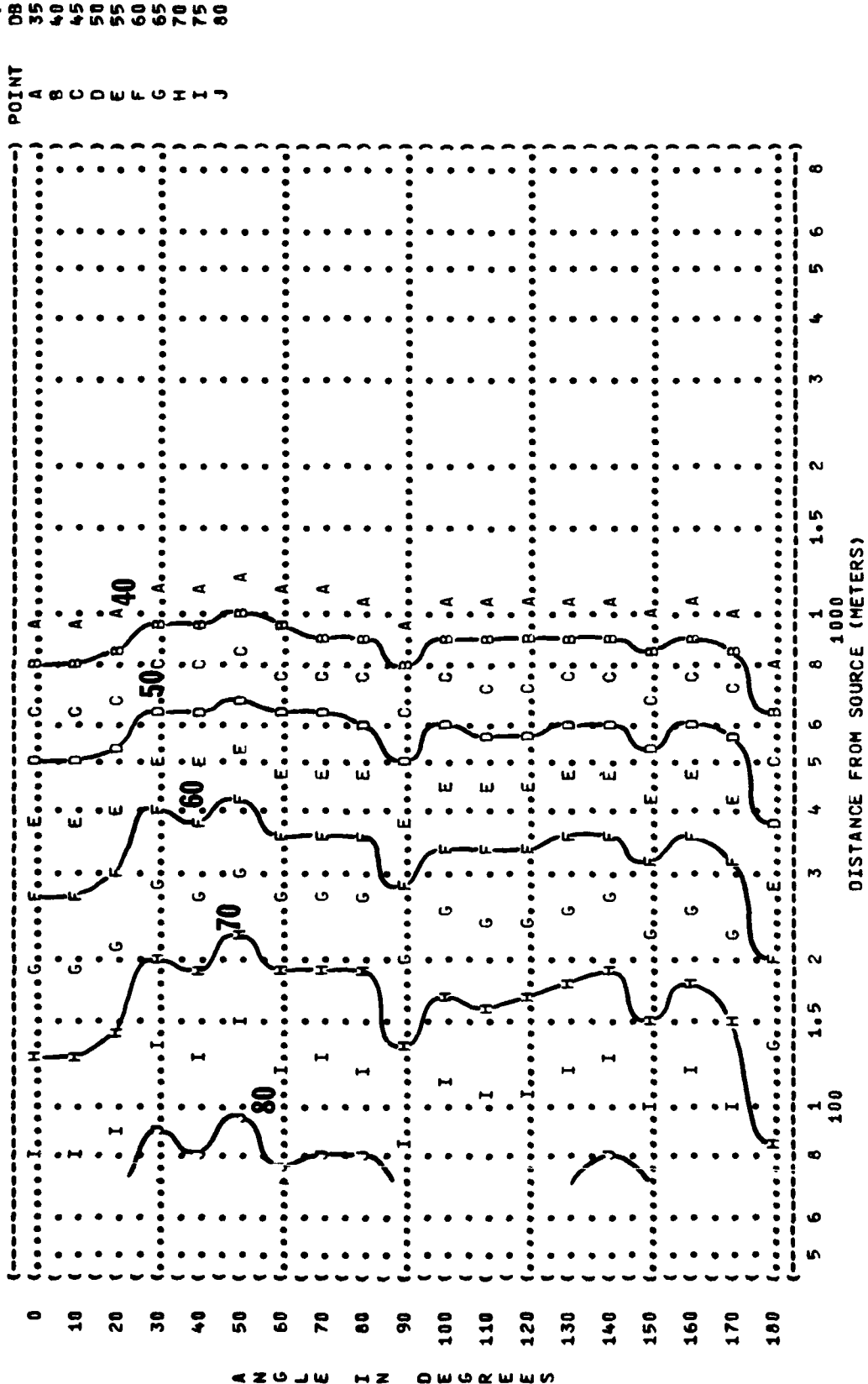
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( FIGURE: SOUND PRESSURE LEVEL {SPL} ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) ) )
( ( 10 ) ) )
( ( 2000 HZ OCTAVE BAND ) ) )
(-----)
( NOISE SOURCE/SUBJECT: ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) ) )
( ( AF32A-17 SUPPRESSOR ) ) )
( ( ENGINE J75-P-17 ) ) )
( ( FAR FIELD NOISE ) ) )
( ( OPERATION: ) ) )
( ( 95% RPM ) ) )
( ( SINGLE ENGINE ) ) )
( ( GROUND RUNUP (SUPPRESSED) ) ) )
( ( BAR PRESS = .760 M HG ) ) )
( ( REL HUMID = 70 % ) ) )
( ( TEMPERATURE = 15 C ) ) )
( ( RUN 03 ) ) )
( TEST 77-778-001 )
( OMEGA 1.4 )
(-----)

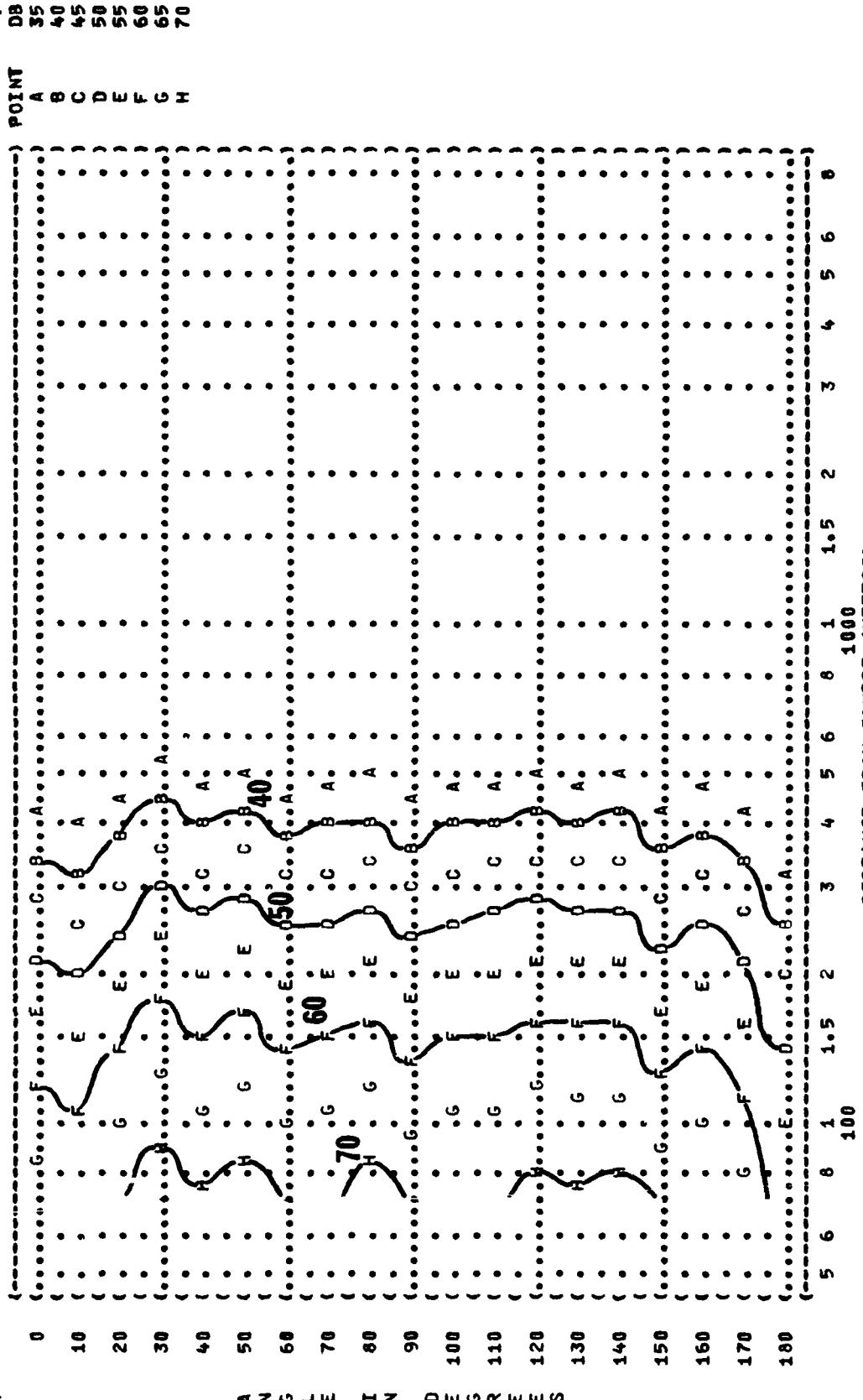
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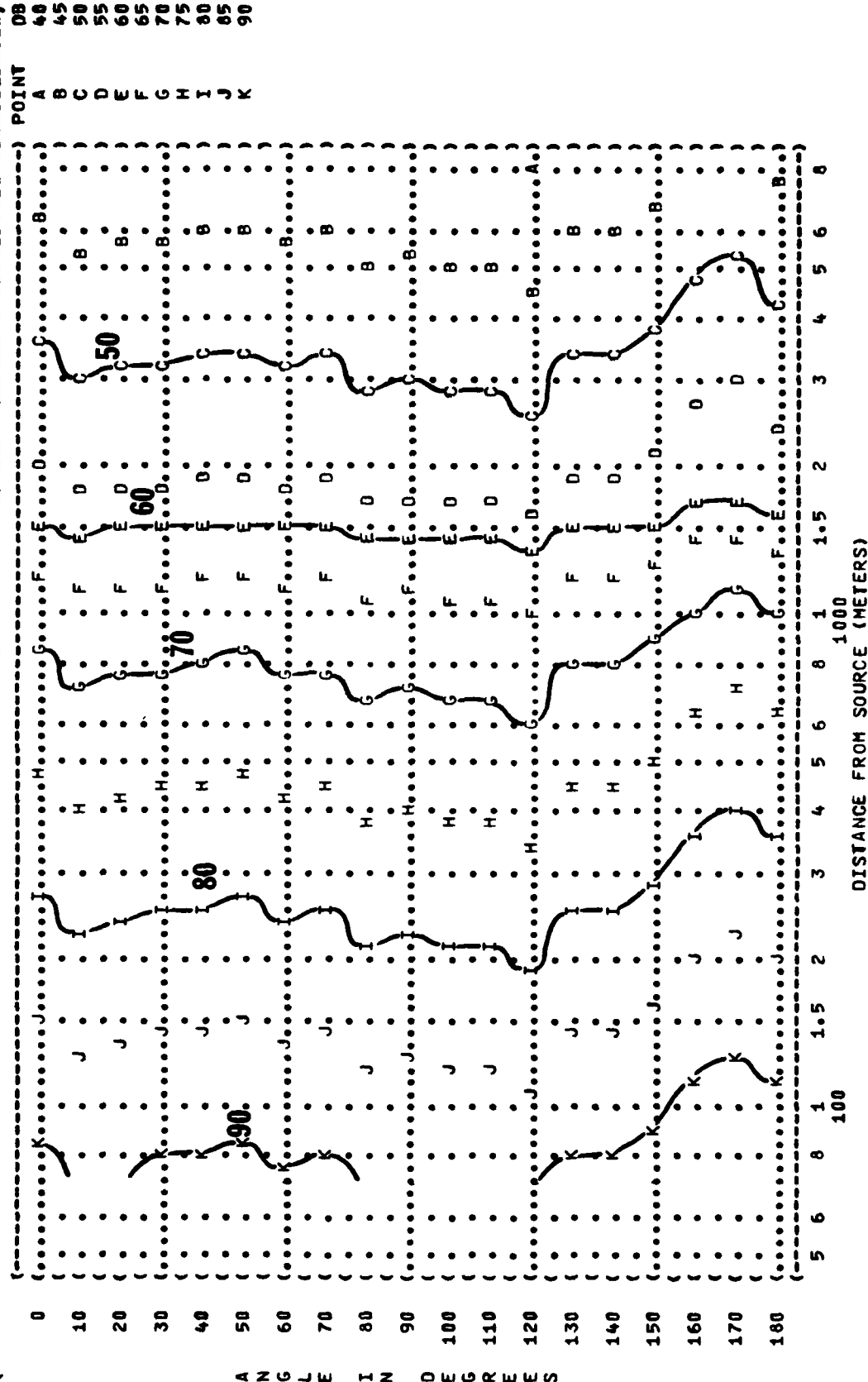
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 () TEST 77-776-001
 () RUN 03
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:
 (F-106 AIRCRAFT IN THE) TEMP = 15 C
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE)) PAGE 25



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (8000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (95% RPM
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE ()
 () IDENTIFICATION:
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 03
 () TEMP = 15 C
 () BAR PRESS = .760 M HG
 () 24 JAN 79
 () REL HUMID = 70 %
 () PAGE 26

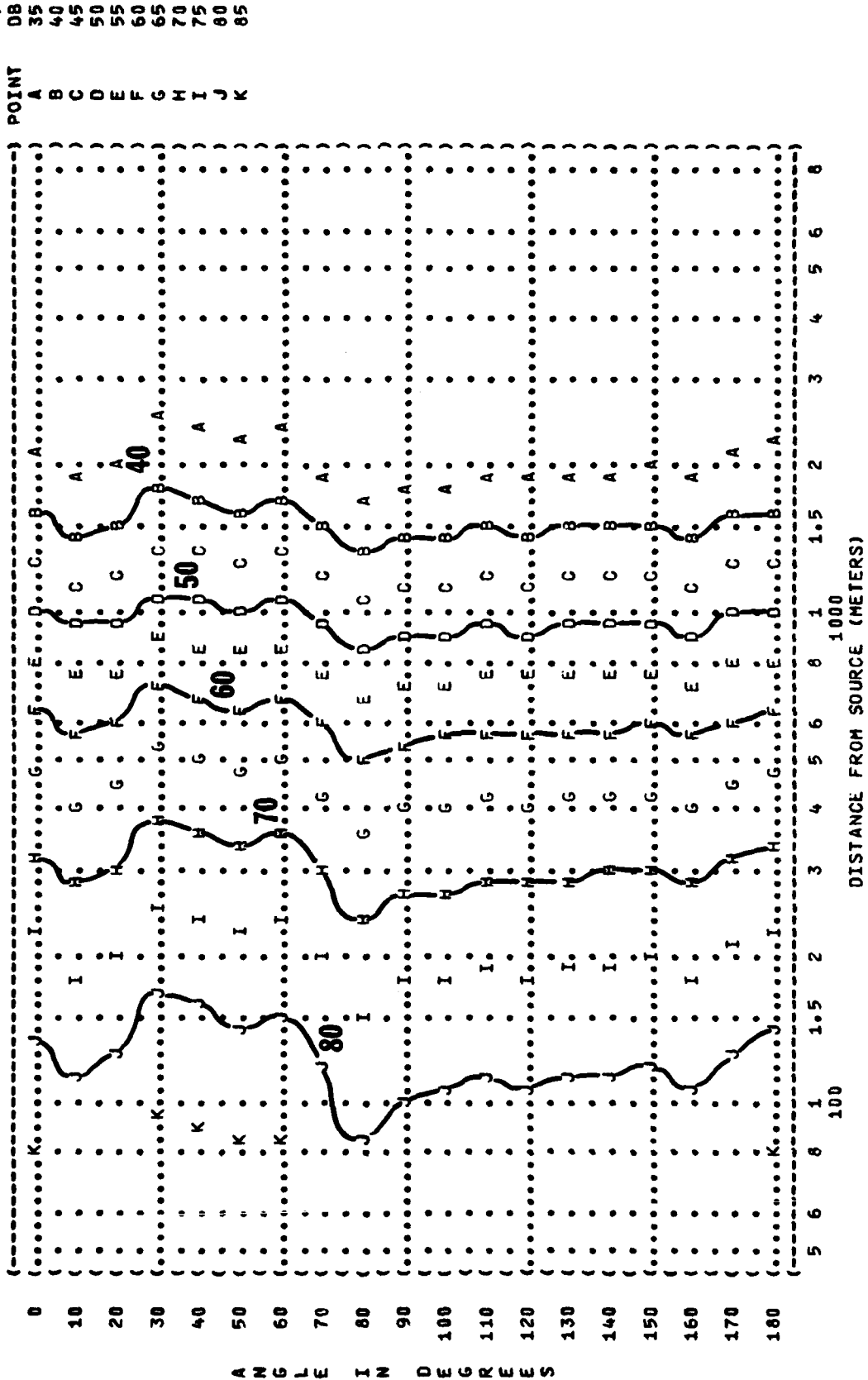


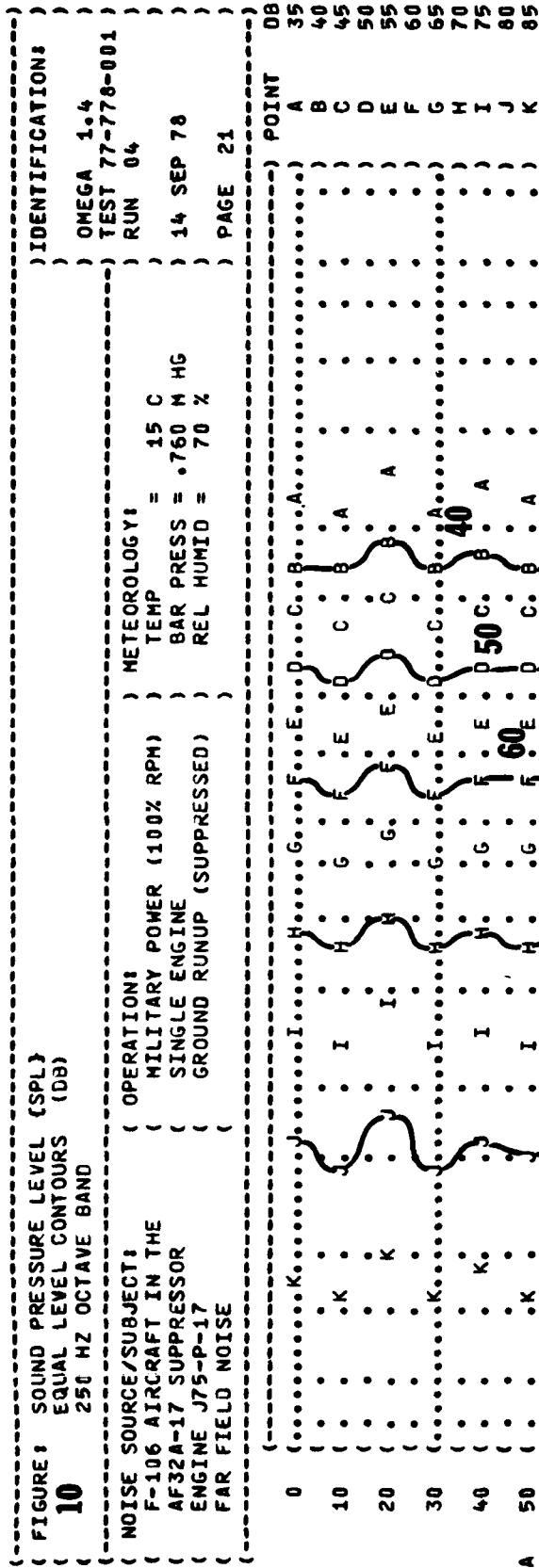
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (31.5 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION: (METEOROLOGY: (TEMPERATURE = 15 C
 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM) (BAR PRESS = .760 M HG
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE (REL HUMID = 70 %
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED) (PAGE 18
 (FAR FIELD NOISE (



A N G L E I N D E G R E E S

(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (EQUAL LEVEL CONTOURS (DB)
 (10 125 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:
 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM)) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE ()) PAGE 20
 (IDENTIFICATION:)
 () OMEGA 1.4
 () TEST 77-778-001
 () RUN 04
 () 14 SEP 78

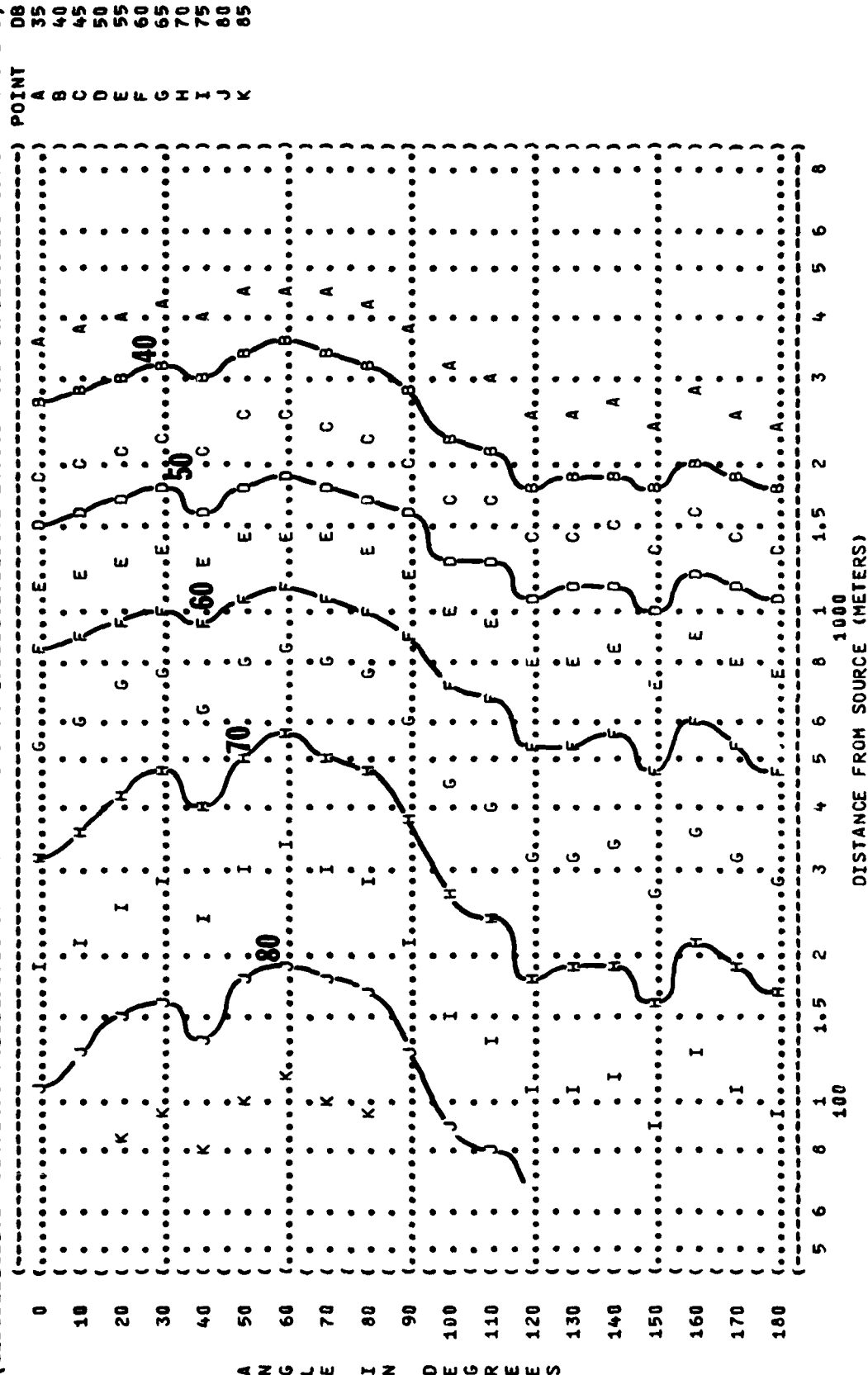




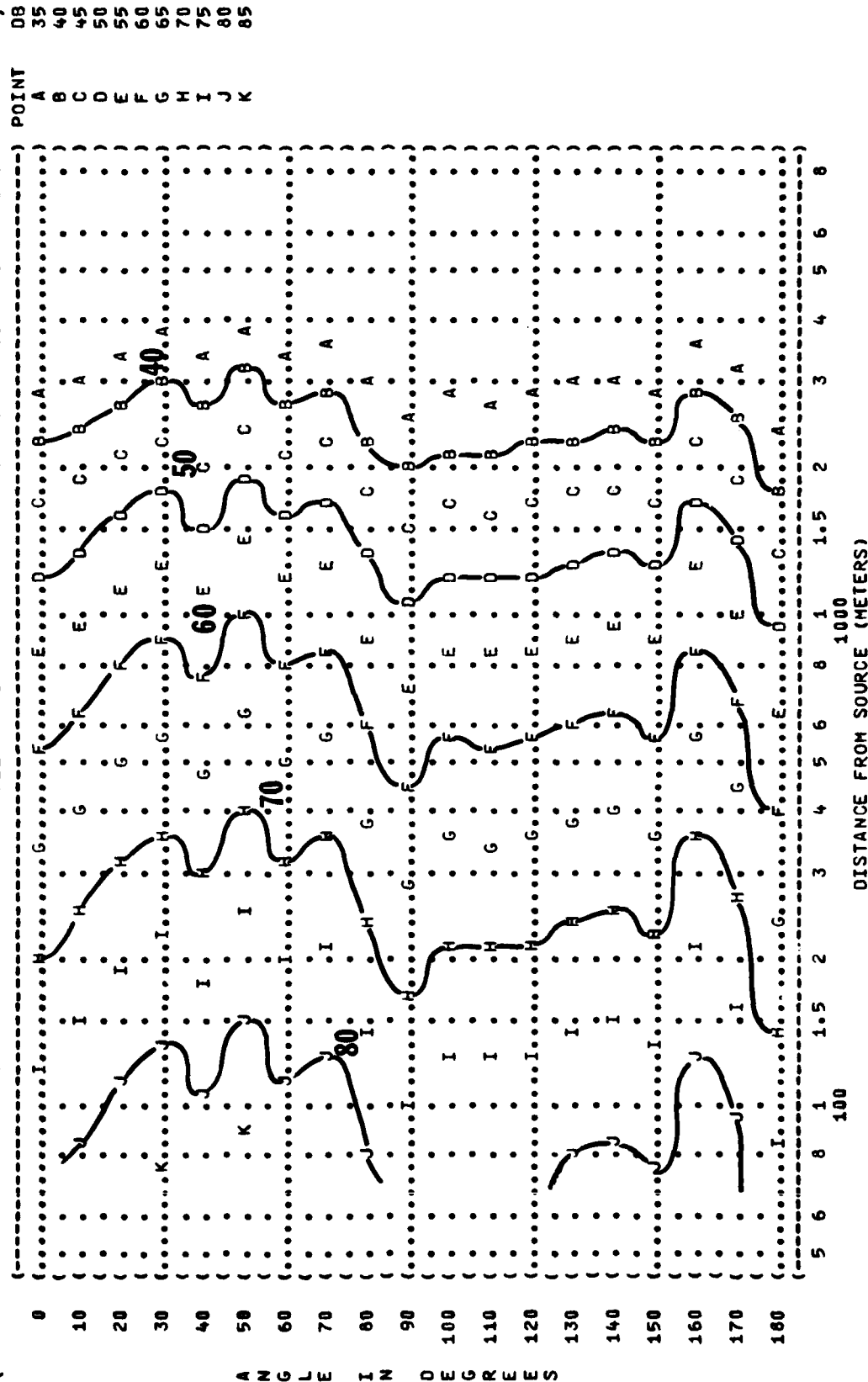
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 (500 HZ OCTAVE BAND
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 (F-106 AIRCRAFT IN THE (MILITARY POWER (100% RPM)
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)
 (FAR FIELD NOISE (

) IDENTIFICATION:
)
) OMEGA 1.4
) TEST 77-778-001
) RUN 04
) 14 SEP 78
)
) PAGE 22

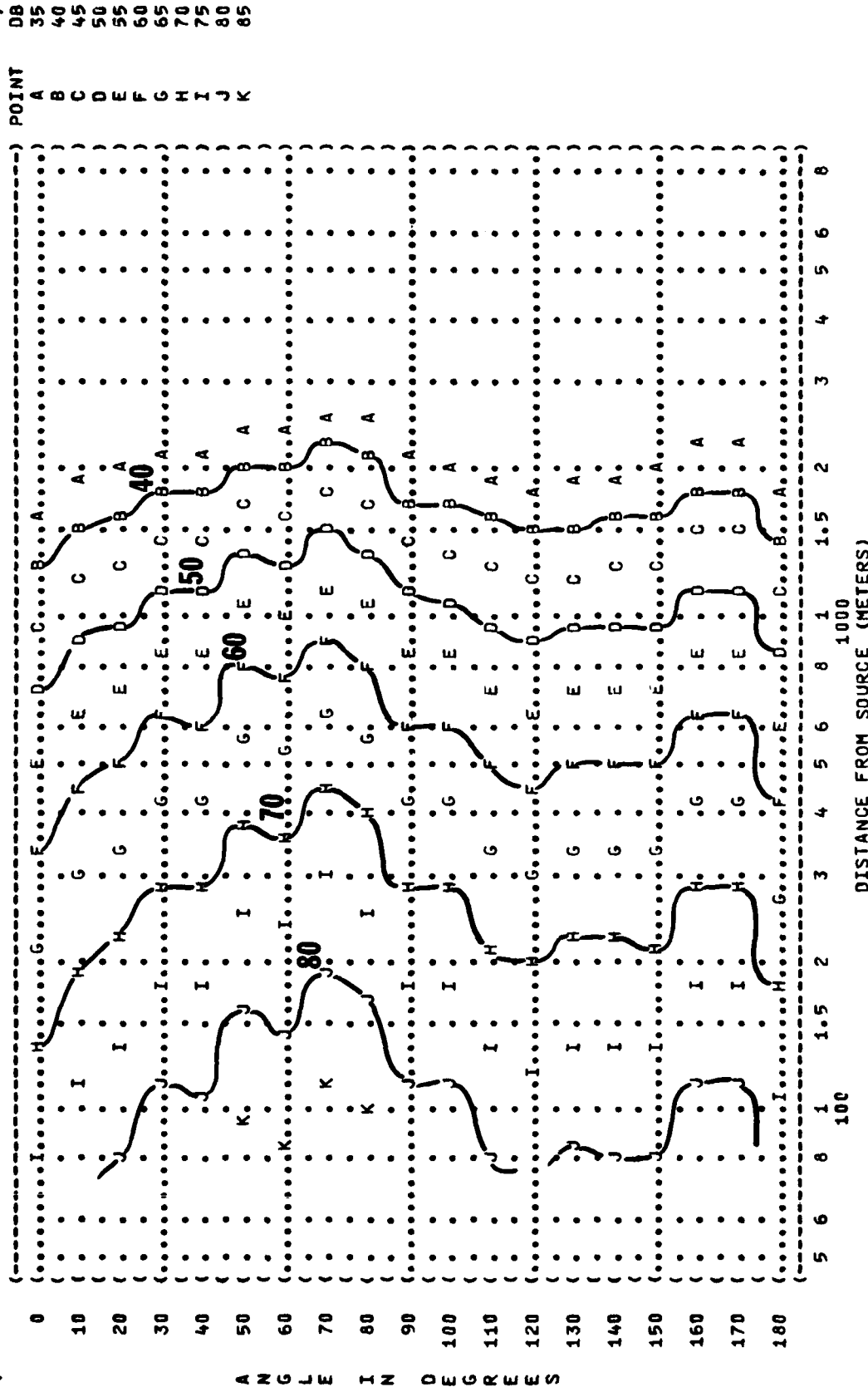
) METEOROLOGY:
) TEMP = 15 C
) BAR PRESS = .760 M HG
) REL HUMID = 70 %



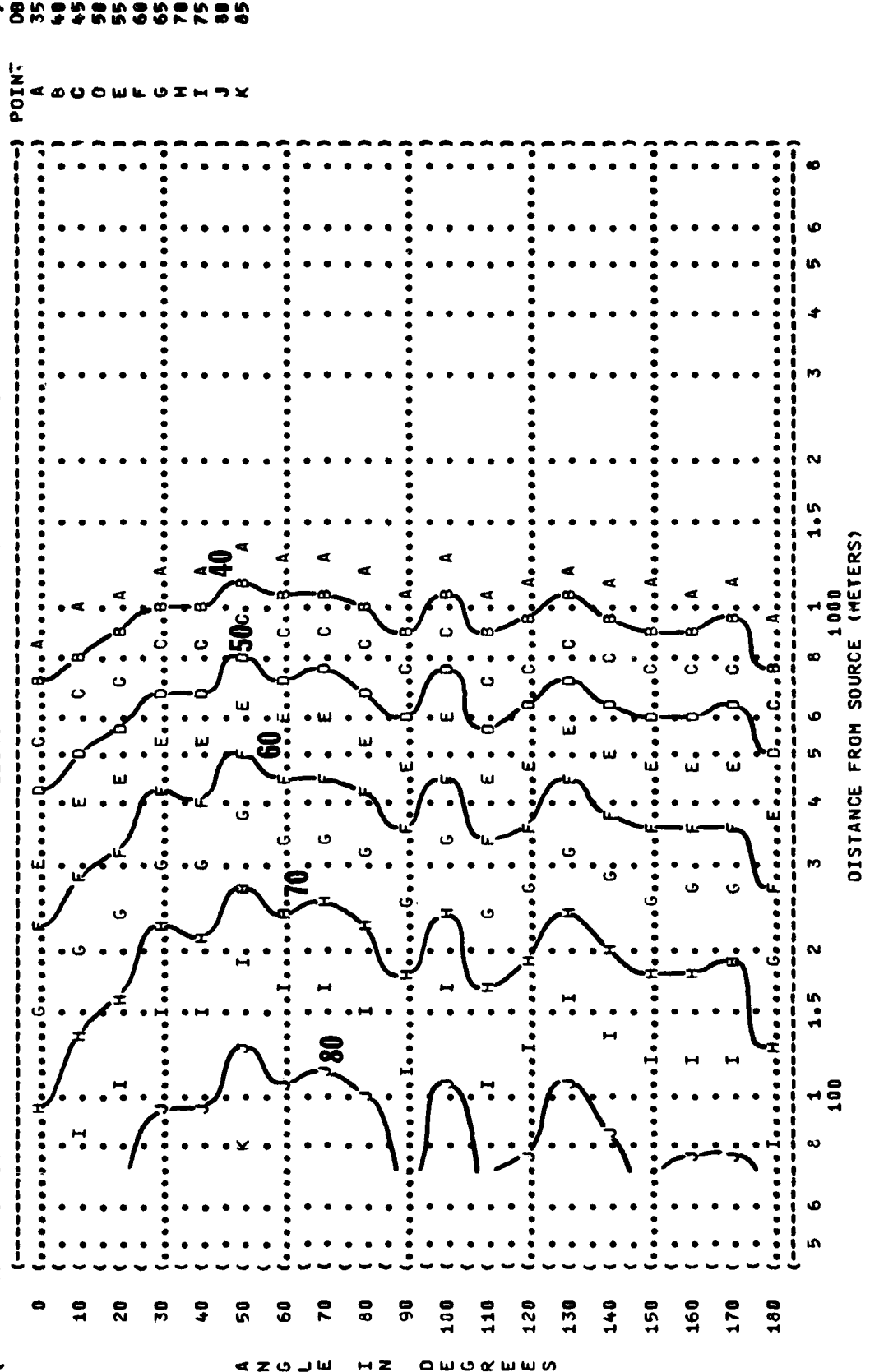
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 (10 EQUAL LEVEL CONTOURS (DB))
 (1000 HZ OCTAVE BAND)
 (NOISE SOURCE/SUBJECT:)
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 (AF32A-17 SUPPRESSOR)
 (ENGINE J75-P-17)
 (FAR FIELD NOISE)
 (OPERATION:)
 (MILITARY POWER (100% RPM))
 (SINGLE ENGINE)
 (GROUND RUNUP (SUPPRESSED))
 (METEOROLOGY:)
 (TEMP = 15 C)
 (BAR PRESS = .760 M HG)
 (REL HUMID = 70 %)
 (IDENTIFICATION:)
 (OMEGA 1.4)
 (TEST 77-778-001)
 (RUN 04)
 (14 SEP 78)
 (PAGE 23)



(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (2000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT:
 (F-106 AIRCRAFT IN THE
 (AF32A-17 SUPPRESSOR
 (ENGINE J75-P-17
 (FAR FIELD NOISE
 (OPERATIONS:
 (MILITARY POWER (100% RPM)
 (SINGLE ENGINE
 (GROUND RUNUP (SUPPRESSED)
 (METEOROLOGY:
 (TEMP = 15 C
 (BAR PRESS = .760 M HG
 (REL HUMID = 70 %
 (IDENTIFICATION:
 (OMEGA 1.4
 (TEST 77-778-001
 (RUN 04
 (14 SEP 78
 (PAGE 24



(FIGURE: SOUND PRESSURE LEVEL (SPL)) IDENTIFICATION:)
 (EQUAL LEVEL CONTOURS (DB)))
 (10 4000 HZ OCTAVE BAND) OMEGA 1.4)
 () TEST 77-778-001)
 () RUN 04)
 (NOISE SOURCE/SUBJECT:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE)) PAGE 25)



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AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATTERSON AFB OH F/6 1/2
USAF BIODENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 135. F-106 AI--ETC(U)
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AMRL-TR-75-50-VOL-135

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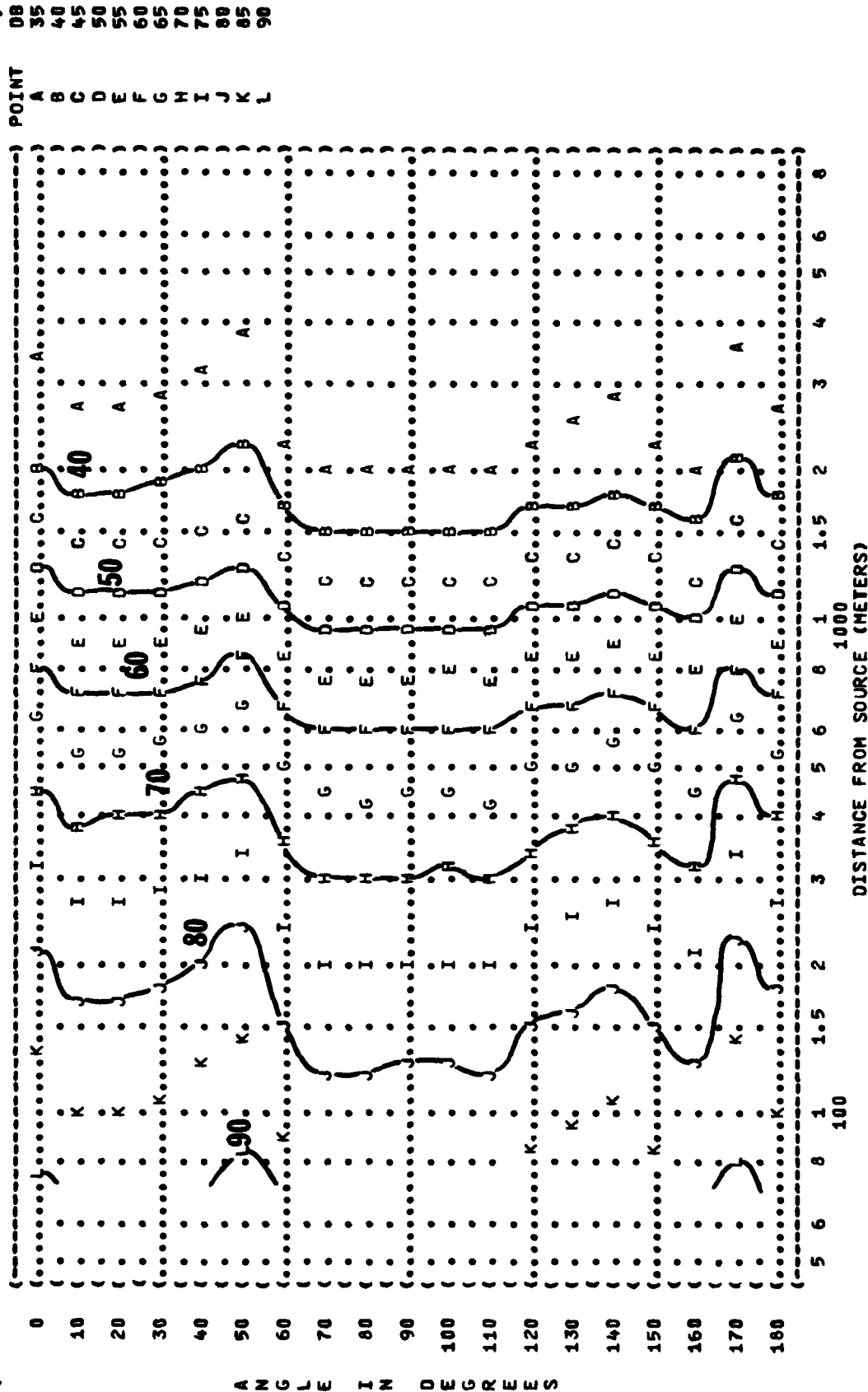
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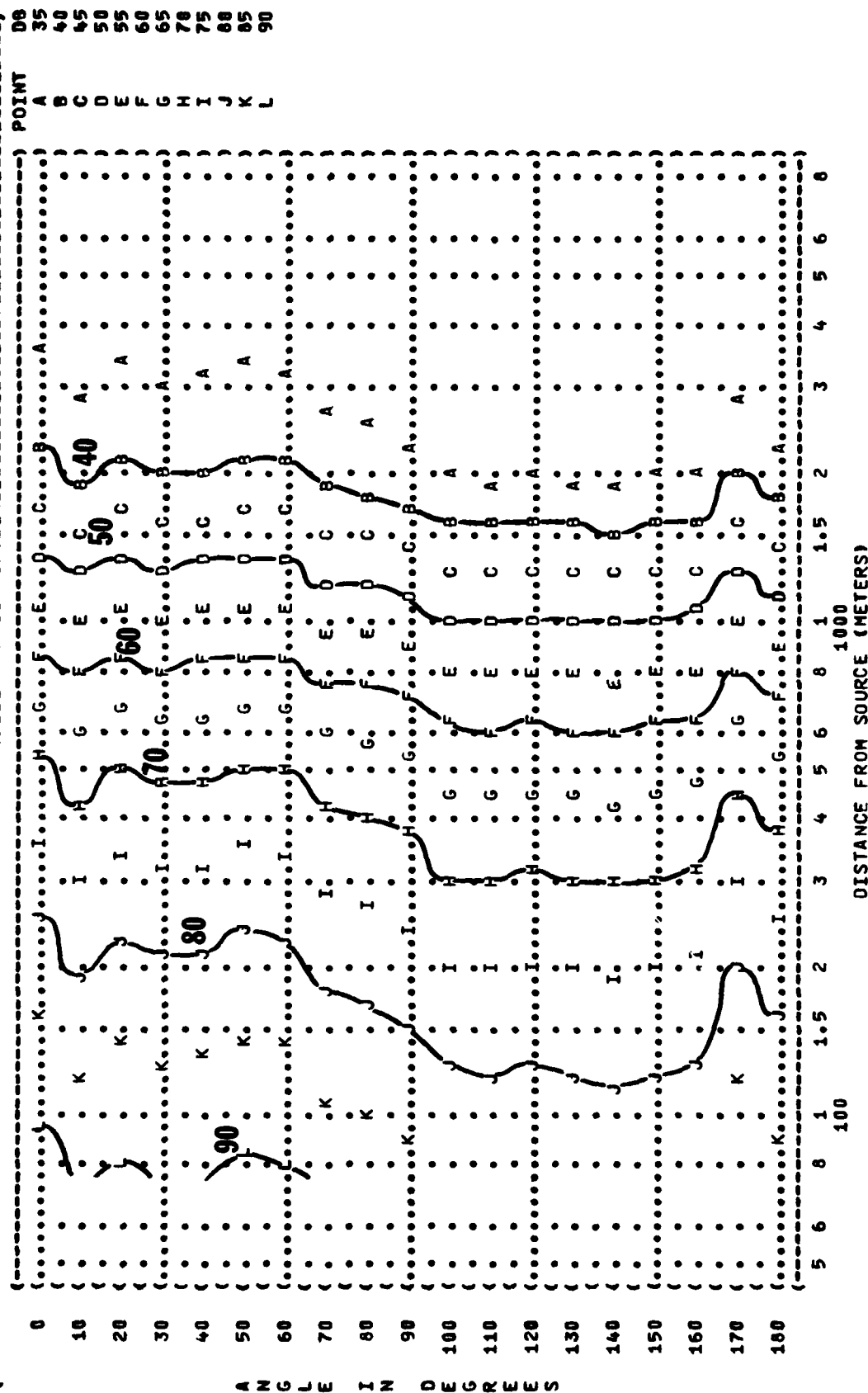
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 (125 HZ OCTAVE BAND))
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 (F-106 AIRCRAFT IN THE) AFTERBURNER POWER) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR) SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17) GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE)) PAGE 20)

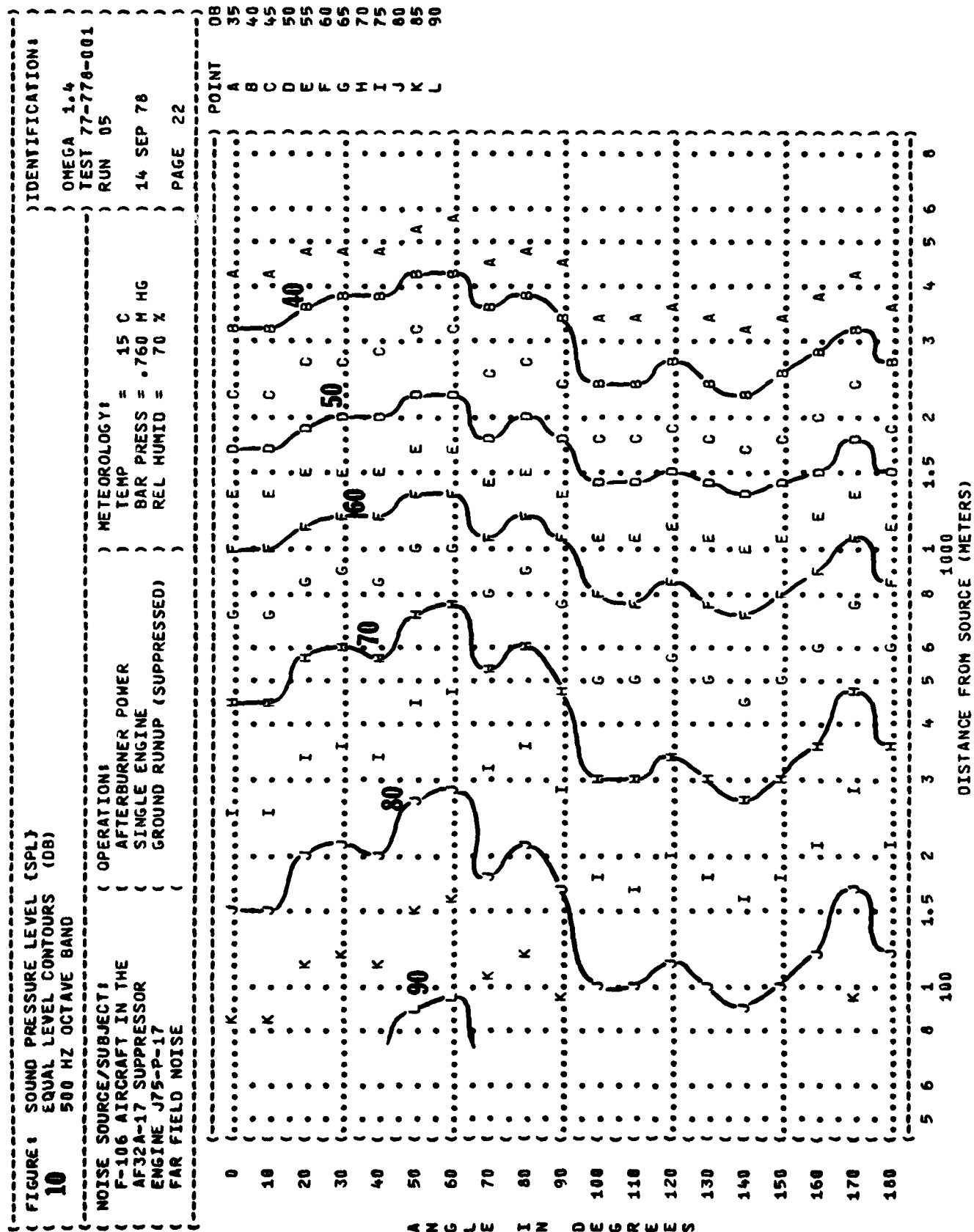


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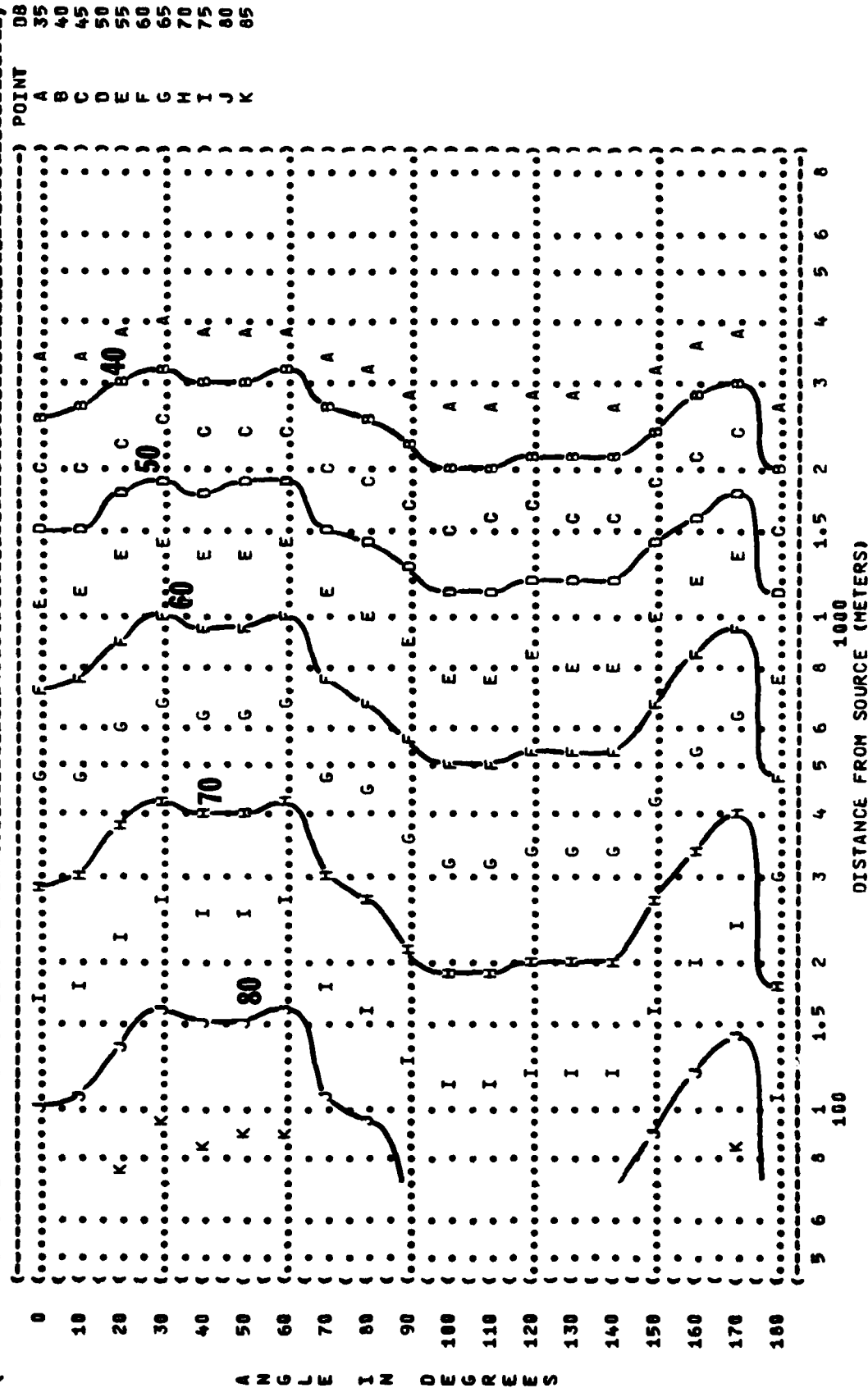
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( ( 10 EQUAL LEVEL CONTOURS (DB) ) ) )
( ( 250 HZ OCTAVE BAND ) ) OMEGA 1.4 )
(-----)
( ( NOISE SOURCE/SUBJECT: ) ) METEOROLOGY: )
( ( F-106 AIRCRAFT IN THE ) ) TEMP = 15 C )
( ( AF32A-17 SUPPRESSOR ) ) BAR PRESS = .760 M HG )
( ( ENGINE J75-P-17 ) ) REL HUMID = 70 % )
( ( FAR FIELD NOISE ) ) PAGE 21 )
(-----)

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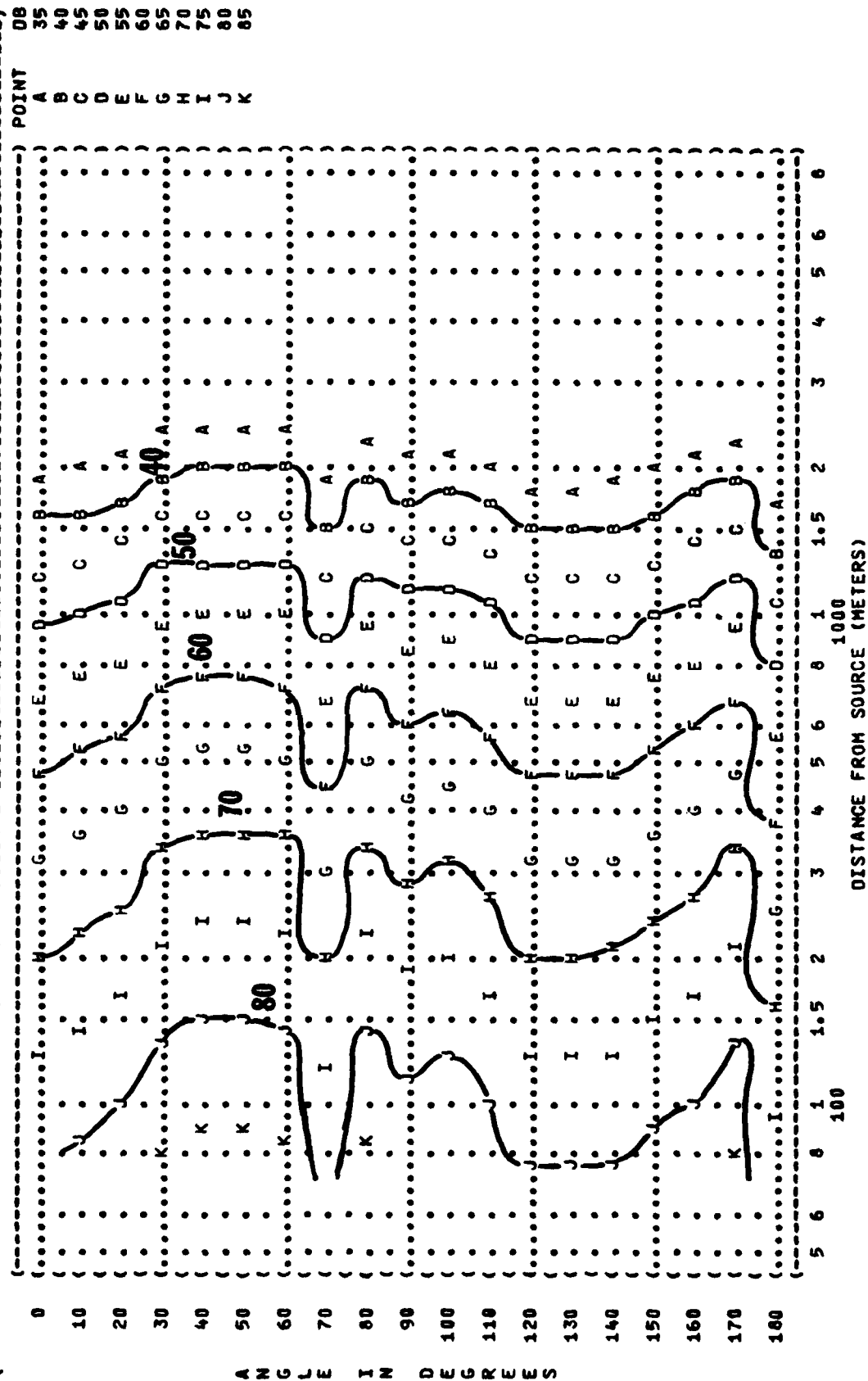
(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (1000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 23)



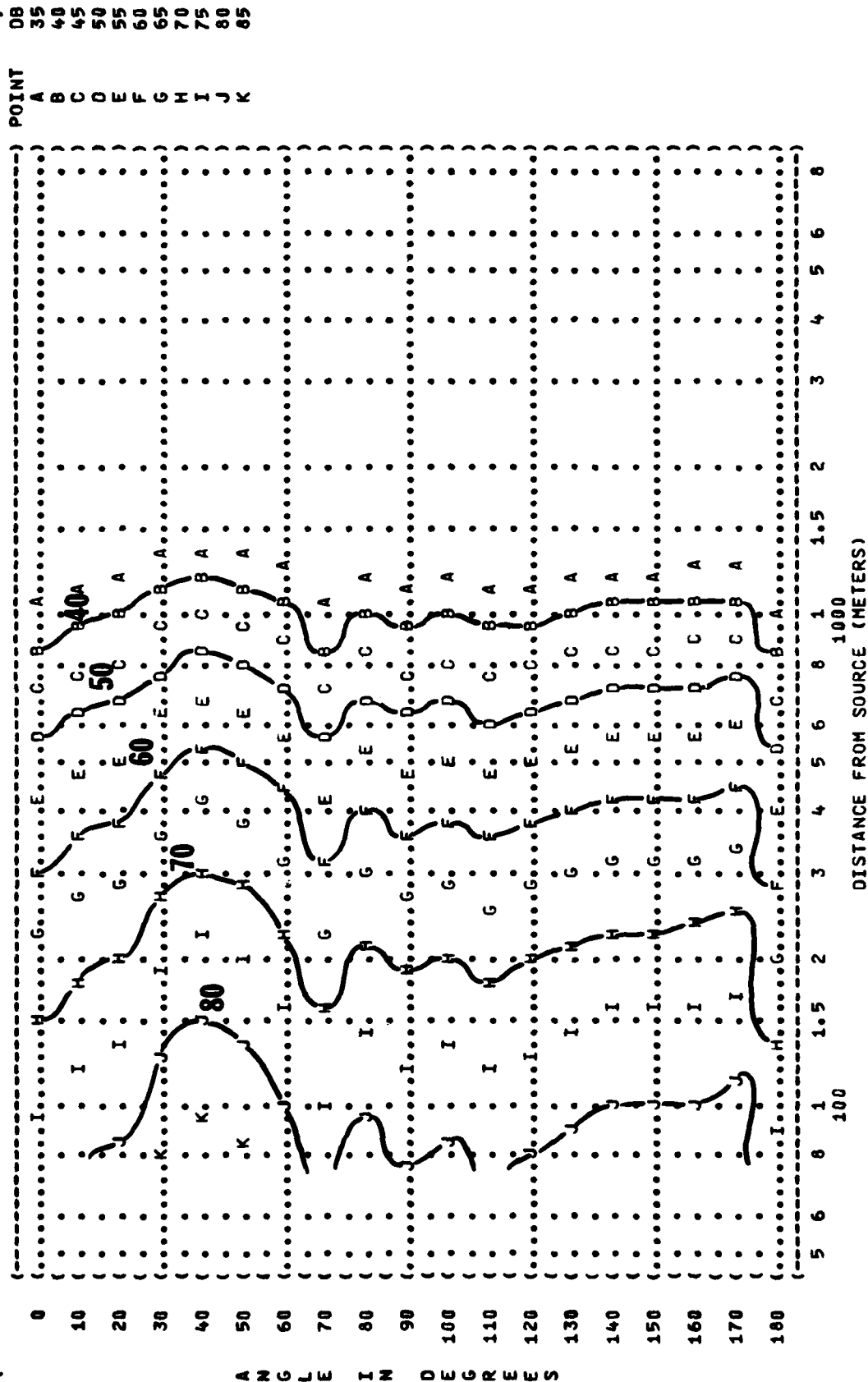
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(-----)
( ( FIGURE: SOUND PRESSURE LEVEL {SPL} ) IDENTIFICATION: )
( ( EQUAL LEVEL CONTOURS (DB) ) )
( ( 10 ) )
( ( 2000 HZ OCTAVE BAND ) )
(-----)
( ( NOISE SOURCE/SUBJECT: ) )
( ( F-106 AIRCRAFT IN THE ) )
( ( AF32A-17 SUPPRESSOR ) )
( ( ENGINE J75-P-17 ) )
( ( FAR FIELD NOISE ) )
(-----)
( ( OPERATION: ) )
( ( AFTERBURNER POWER ) )
( ( SINGLE ENGINE ) )
( ( GROUND RUNUP (SUPPRESSED) ) )
(-----)
( ( METEOROLOGY: ) )
( ( TEMP = 15 C ) )
( ( BAR PRESS = .760 M HG ) )
( ( REL HUMID = 70 % ) )
(-----)
( ( OMEGA 1.4 ) )
( ( TEST 77-778-001 ) )
( ( RUN 05 ) )
( ( 14 SEP 78 ) )
( ( PAGE 24 ) )
(-----)

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(FIGURE: SOUND PRESSURE LEVEL (SPL)
 (10 EQUAL LEVEL CONTOURS (DB)
 (4000 HZ OCTAVE BAND
 (NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %
 (FAR FIELD NOISE () PAGE 25)



A N G L E I N D E R E E S

FIGURE: SOUND PRESSURE LEVEL (SPL)
 10 EQUAL LEVEL CONTOURS (DB)
 8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT: (OPERATION:) METEOROLOGY:)
 (F-106 AIRCRAFT IN THE (AFTERBURNER POWER) TEMP = 15 C)
 (AF32A-17 SUPPRESSOR (SINGLE ENGINE) BAR PRESS = .760 M HG)
 (ENGINE J75-P-17 (GROUND RUNUP (SUPPRESSED)) REL HUMID = 70 %)
 (FAR FIELD NOISE ()) PAGE 26)

IDENTIFICATION:)
)
) OMEGA 1.4
) TEST 77-778-001
) RUN 05

